

**Using the Neurobiology of Human Emotions and Feelings,  
Elaboration Likelihood Model of Persuasion and Rhetorical  
Figures to Modify the Business-to-business Marketing  
Communications Effects Model**

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## ***Preface***

My interest in human emotions began as an undergraduate philosophy student and has continued on through my second undergraduate degree in chemistry, emphasis biochemistry, and my Master's in Strategic Communication.

For my undergraduate philosophy thesis, I counter argued David Hume's stance that there cannot be an idea of self in the sense that self has identity and simplicity. Hume was an influential Scottish philosopher that lived 1711–1776. One of the examples that I used to counter argue his viewpoint was that each human has their own unique set of emotions.

I wrote about the ancient evolutionary history, biosynthesis and degradation of the molecule tryptophan for my undergraduate chemistry thesis. Tryptophan is the precursor molecule for the neurotransmitter serotonin. Serotonin imbalances have been associated with certain psychological disorders.

Antonio Damasio's research provides yet another avenue to better understand the neurobiological underpinnings of human emotions and to fully appreciate their unique role in self-identity, self-preservation and individual decision making.



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## ***Introduction***

### ***Differences in Business-to-business and Business-to-consumer Advertising and Marketing***

In the United States (U.S.), advertising and marketing is normally divided into the two categories of business-to-business (B2B) and business-to-consumer (B2C) due to the unique aspects of each segment. Characteristics of B2B advertising and marketing include (Oliva, 2005):

- transactions occur among and within value chains
- small numbers of large customers require personalized marketing and often times customized products and prices
- financial transactions generally large
- complex and lengthy selling process includes many players constituting a “demand decision chain” or “buying center”
- sales efforts typically focus on key account management and multiple purchasing influencers rather than end-users.

Whereas, attributes of B2C advertising and marketing include (Oliva, 2005):

- transactions from dealer to end-consumer
- primary focus on brand management
- large numbers of similar consumers
- financial transactions usually small
- linear selling process normally of short duration

- sales activities focused on consumer purchaser/end-user.

### ***Advertising and Marketing Communication Models in Consumer and Business-to-business Journals***

Numerous articles have been written about advertising and marketing communication models in consumer and B2B journals (Bagozzi, et al., 1999; Gilliland and Johnston, 1997; Jensen and Jepsen, 2007; Lynch and De Chernatony, 2004; Ojasalo, 2001; Petty, et al., 1983; Petty and Cacioppo, 1986; Petty, et al., 1991; Petty, et al., 1993; Sheth and Sharma, 2006). According to Sheth and Sharma (2006), however, there needs to be more marketing research on the behavior of individual decision making within the B2B business buying process or buying center: what is the organizational influence in individual decision making and how are schemas, cognition and persuasion knowledge used in individual decision making? They also state there needs to be more research on the decision-making process itself because “business-to-business marketing continues to regard individual decision-making as a black box” (page 425).

### ***The Business-to-business Buying Center: Advertising and Marketing Challenges***

Sheth and Sharma (2006) explain that B2B marketing is challenging because B2B companies have complex business buying behaviors and the business buying process normally involves multiple participants who uniquely influence the buying decision. Additionally, information on the buying center process requires “organizational cooperation and intimate knowledge of how the organization works, which is not easily attained” (page 423).

According to Gilliland and Johnston (1997), B2B decisions are heavily influenced by personal interactions within a buying group. In addition, opportunities for personal financial and intraorganizational political gain may be more influential on the final product decision than product specifications and other more tangible factors.

Since buying decisions in B2B organizations are often made in groups, one would tend to think that the buying decisions are supported by logical reasoning. In reality though, B2B buying center decisions and dynamics are driven by a variety of factors including an individual member's psychological and emotional state, political perceptions within the company, and interpersonal influence attempts (Gilliland and Johnston, 1997).

### ***Affections, Emotions and Feelings***

The use of affect or affections (emotions and feelings) in persuasive communications has been written about in consumer advertising and marketing articles (Petty, et al., 1991; Bagozzi, et al., 2002; Petty, et al., 1993) and B2B advertising and marketing articles (Gilliland and Johnston, 1997; Lynch and De Chernatony, 2004; Bagozzi, et al., 1999; Ojasalo, 2001; Jensen and Jepsen, 2007).

There is, however, scant, if any at all, consumer or B2B advertising and marketing articles written about the need to better understand the neurobiology of human emotions and feelings. Similarly, consumer and B2B advertising and marketing practitioners have not pursued, or written about, developing more effective (persuasive) communication pieces based on an understanding of the neurobiology of human emotions and feelings.

## ***Need for a Modified Business-to-business Marketing Communications Effects Model***

Gilliland and Johnston (1997) developed the Business-to-business Marketing Communications Effects Model (see Figure 1) to address the unique challenges of advertising and marketing to individual members of a B2B buying decision center. They also constructed their model to represent the roles of cognition and emotion in an individual buying center member's processing of a brand, prompted by an ad stimulus, and the member's subsequent attitude toward the ad ( $A_{ad}$ ) and attitude toward the brand ( $A_{brand}$ ).

The B2B communications model developed by Gilliland and Johnston (1997) correctly includes the importance of personal and situational relevance in antecedent conditions to processing an ad or brand and the consequent behaviors after processing an ad or brand based on the "buy task involvement" of the member of the buying center. The model, however, does not accurately represent how individual members of a buying center use emotions to process an ad or brand or how  $A_{ad}$  and  $A_{brand}$  are formed. The model also does not address or include the benefits using rhetorical figures in B2B advertisements. A rhetorical figure is a verbal phrase or visual image that artfully deviates from the expectation of its audience (McQuarrie and Mick, 1996, 1999) and "puts a twist on the familiar" (Tom and Eves, 1999). Consequently, there is a need to modify the Business-to-business Marketing Communications Effects Model.

Support for a modified Business-to-business Marketing Communications Effects Model will be drawn from the Elaboration Likelihood Model of Persuasion, benefits of using rhetorical figures in ads, information obtained from advertising executives on the

current practices of B2B advertising agencies, and most importantly, the neurobiology of human emotions and feelings.

### ***Research Questions***

Additional support for the need to modify the Business-to-business Marketing Communications Effects Model will be obtained by answering the following research questions:

- 1) How are verbal and visual rhetorical figures used in B2B ads?
- 2) Why are verbal and visual rhetorical figures used in B2B ads?
- 3) How does the Business-to-business Marketing Communications Effects Model relate to current practices of B2B advertising agencies?

The research questions will be answered through a literature review, content analysis of B2B ads, and in-depth interviews with B2B advertising executives.

### ***Literature Review***

The literature review will highlight the main points of the Business-to-business Marketing Communications Effects Model, the Elaboration Likelihood Model of Persuasion, benefits and possible pitfalls of using rhetorical figures in B2C advertising and marketing, and the neurobiology of human emotions and feelings.

### ***The Business-to-business Marketing Communications Effects Model***

In their 1997 article, Gilliland and Johnston state that B2B advertising models fail to adequately consider the affective and emotional responses of ad viewers and the

realities of interpersonal influence attempts in a B2B buying center. They assert that an adequate model must consider both internally directed responses to an advertisement and how these responses may motivate interpersonal action within the buying center.

To accommodate existing buying center behavior models yet offer a clearer explanation of the role that advertising effects play in the buying center process of B2B organizations, Gilliland and Johnston (1997) developed the Business-to-business Marketing Communications Effects Model (see Figure 1). The model has three conditional levels: antecedent conditions, information processing and consequent conditions. At the heart of the model is an involvement construct, called “buy task involvement,” which moderates both the processing of B2B marketing communications and the consequent behavior of an individual member in a buying center.

### ***Buy Task Involvement***

Buy task involvement (BTI) is a feeling of personal relevance that buying center members experience toward the buying center’s purchase of a specific product in a specific buying situation; it is similar to the “stake” that an individual member has in a purchasing decision (Gilliland and Johnston, 1997).

In more detail, BTI is an individual buying center member’s internal state of arousal with intensity, direction, and persistence properties directed toward the specific product in the specific buying situation. The level of arousal experienced by a buying center member varies in degree for different products and different purchase situations. In addition, since BTI is a feeling specific to each individual in a buying center, each member of the buying center may experience a different level of BTI (Gilliland and Johnston, 1997).



### ***Antecedent Conditions to Buy Task Involvement***

Antecedent conditions to BTI include personal relevance and situational relevance. Personal sources of relevance include existing personal relevance toward the product or the purchase situation, personal goals and values, ego-related significance of the object in terms of boosting a buying member's self-esteem if the object is purchased, and personal consequences of the purchasing decision — members most likely to benefit or suffer from the decision of the buying center are more influential in the decision process (Gilliland and Johnston, 1997).

Situational sources of relevance vary with the specific buying situation. Sources include the role that the individual holds in the buying center, which implies varying levels of participation in the decision of the buying center; the importance of the buying situation to the firm; and the importance of the purchase to the individual. Examples of generic buying center roles include "initiator," "buyer," "decision maker," "user," "influencer," and "gatekeeper" (Gilliland and Johnston, 1997).

Gilliland and Johnston (1997) assert that the existence of personal and/or situational sources of relevance increase a buying center member's overall feeling of relevance toward a specific purchase and therefore the level of BTI.

### ***Moderators of Buy Task Involvement***

Moderators of BTI include a B2B buying center member's opportunity and ability to process related information. Gilliland and Johnston (1997) state that given a member's individual level of relevance, BTI will be positively influenced by an increase in an individual member's level of attention, a decrease in the distractions surrounding a member and exposure to repetitive messages. In addition, due to the unique nature of

B2B buying centers, members of a buying center also have opportunities to process information related to the decision through outside personnel such as vendors, associates and other firm employees.

A buying center member's ability to process pertinent information is regulated by their need for cognition and previous knowledge and familiarity with the product or service being considered. Accordingly, as the buying process continues, buying center members become more knowledgeable of the product being purchased based on the additional information they have collected. Thus, as the buying process progresses, BTI will potentially increase (Gilliland and Johnston, 1997).

### ***Business-to-business Ads and Buying Center Member Information Processing***

The central route to attitude change (or central route processing) includes cognitions and consideration of arguments that are specific to the situation. Peripheral route processing is generally considered to be the processing of information without thinking about the merits of the issue at hand. Thus, peripheral cues such as positive or negative affect, the layout or design of the advertisement or attractive expert sources are more effective at changing attitude when a consumer or a B2B buying center member is processing information via peripheral route processing (Gilliland and Johnston, 1997).

Following the definitions of central and peripheral route processing, buying center members that are more highly involved with a product (have a high BTI) tend to process relevant information via the central route whereas those that are less involved or uninvolved process relevant information via the peripheral route—consequently, after being exposed to advertising stimuli, BTI moderates a buying center member's route and

level of elaboration on a brand. And, as elaboration increases, a member will increase their total and directed cognitive response activity toward the stimuli and increase their extent of message processing (Gilliland and Johnston, 1997).

In addition, as a buying center member's BTI increases, he or she will experience an increase in goal-directed information processing and thoughts about the issue at hand. Thus, according to Gilliland and Johnston (1997), goal-directed information processing is indicative of central route processing.

Overall, Gilliland and Johnston (1997) contend advertisements that address peripheral issues will be attended to when BTI is low and advertisements that address more central issues will be attended to when BTI is high. Correspondingly, ads with more cognitive appeals will have stronger effect on attitude formation in high-involvement situations than in low-involvement situations and ads with more emotional appeals will have stronger effects in low-involvement situations than in high-involvement situations.

### ***Consequences of Ad Processing***

The consequences of a buying center member processing B2B advertisements include advertising effects and behavior. The individual advertising effects are potentially the same as those experienced by a viewer of a consumer ad (Gilliland and Johnston, 1997).

An advertisement may stimulate both feeling from the advertisement and cognitions about the brand. An advertisement will also produce different responses in individual buying center members depending on their level of elaboration or involvement.

Members who experience high BTI will tend to process more central route cues [arguments], such as logical brand arguments, than peripheral route cues, such as ad spokespersons. Due to processing central route arguments, these members will produce relatively more cognitive responses from the ad than emotional responses. Other members who experiences low BTI will tend to process the ad more via the peripheral route than the central route. The responses from peripheral route processing will be relatively more emotional than cognitive. Thus, the same ad will produce different responses in different buying center members due to their processing of different cues based on their individual level of BTI (Gilliland and Johnston, 1997).

Feelings generated by the ad will lead to an evaluation of a positive or negative  $A_{ad}$ . Thus, an appealing B2B ad with positive emotions will lead to a stronger liking of the ad itself. Likewise, a positive or negative  $A_{ad}$  will influence a buying center member's formation of a positive or negative evaluation about the brand, i.e., their  $A_{brand}$  (Gilliland and Johnston, 1997).

According to Gilliland and Johnston (1997), the impact of attitudinal change via the central or peripheral route is clear: central route changes are more enduring and longer lasting than peripheral route changes. Similarly, a change in attitude as a result of issue-relevant thinking will last longer than an attitude change generated from peripheral cues.

### ***$A_{brand}$ , BTI, and Buying Center Member Behavior***

Gilliland and Johnston (1997) state that individual information processing and consequent ad effects in a buying center context have a direct parallel to accepted advertising effects models. However, group decision procedures suggest a more

complex relationship exists than the empirically accepted  $A_{\text{brand}} \rightarrow$  purchase intent link found in consumer advertising effects literature. The complexity stems from buying center members being subjected to persuasion from other members, desires of their supervisors, and internal political maneuverings.

Gilliland and Johnston (1997) provide that the link between attitude toward the brand and consequent behaviors is moderated by how an individual buying center member perceives he or she will be affected by the consequences of a purchasing decision: even though their attitudes may be identical, members with more at stake in a decision will engage in behavior consistent with their attitude more than those who would be less affected by the decision. Thus, the buying center member's BTI, or relevance in a buying center decision, moderates the link between  $A_{\text{brand}}$  and selected consequent behaviors.

Based on the relationships between BTI and  $A_{\text{brand}}$ , specific consequent behaviors of buying center members include information search, interpersonal influence attempts, resistance to influence attempts, and purchase intent (Gilliland and Johnston, 1997).

A buying center member's internal information search includes surveying his or her memory for existing information and attitudes. An external information search includes goal-directed searches for information through additional buying center members, colleagues from other firms, sales literature, advertisements, consultants or vendors. Since familiarity and knowledge of products influence information search activity, Gilliland and Johnston (1997) also assert that the focus of a member's search depends on their level of  $A_{\text{brand}}$  moderated by BTI.

In the decision making process of a buying center, individual members will have differing opinions on a variety of issues. Gilliland and Johnston (1997) believe that “a key issue is the amount, direction, and strength of influence attempts made within the buying center” (p. 20). The authors provide that buying center members conduct personal persuasion on other members in an attempt to attain their desired consequences. Also, that influence attempts within an organizational purchase situation have been found to be strongest from those with a personal stake in the decision and who perceive significant consequences as a result of the buying center’s decision. Therefore, a greater level of felt relevance will cause greater concern in a buying center member and motivate them to take the necessary actions to ensure there is a match among the outcome of the task and their individual needs.

Existing  $A_{\text{brand}}$  and BTI will determine a buying center member’s reaction to influence attempts. As stated previously, central route processing results in stronger and more enduring attitudes, and as such, stronger attitudes will result in more counterarguing of messages that are opposed to an existing attitude (Gilliland and Johnston, 1997).

The intent to purchase a product in a B2B context has been measured as a behavioral output variable that is predictive of purchase. Influence attempted on others, willingness to attend to selling information, resisting the influence attempts of others, and requesting inquiries may all be proxies for purchase intent (Gilliland and Johnston, 1997).

## ***Business-to-business Marketing Communications Propositions***

Gilliland and Johnston (1997) provide specific propositions for the constructs and relationships that are unique in the B2B processing context. These propositions, which are repeated from p. 23, are listed below (and identified in Figure 1):

### *Antecedent Conditions to Buy Task Involvement*

P1: Higher personal sources of relevance lead to higher BTI.

P2: Higher situational sources of relevance lead to higher BTI.

### *Moderators of Buy Task Involvement*

P3: More opportunities to process applicable information lead to higher BTI.

P4: A greater ability to process information leads to higher BTI.

### *Internal Consequences of Processing*

P5: Those with high BTI will process an ad by central route cues [the message arguments] and will potentially experience a more enduring  $A_{\text{brand}}$  than those with low BTI, who will process the ad by peripheral route cues.

P6: In buying center situations, BTI moderates the  $A_{\text{brand}}$  / consequent behaviors linkage.

### *External Consequences of Processing*

P7: Buying center members with a strongly positive  $A_{\text{brand}}$  and a high level of BTI

a) will seek more information,

- b) will seek more evaluative information,
- c) are more selective in their information search, and
- d) are better able to learn additional information than other buying center members.

P8: Buying center members with a strongly positive  $A_{\text{brand}}$  and a high level of BTI will engage in greater influence attempts than others.

P9: Buying center members with a strongly positive  $A_{\text{brand}}$  and a high level of BTI will be more resistant to influence attempts than others.

P10: Buying center members with a strongly positive  $A_{\text{brand}}$  and a high level of BTI will have a higher intent to purchase the brand than others.

### ***Implications of the Business-to-business Marketing Communications Effects Model***

By using affect in an advertisement, Gilliland and Johnston (1997) argue that advertisers will more readily tap the set of emotional responses in a buying center member, and depending on existing levels of BTI, an emotional response may elicit not only a more positive perception of the ad itself, but a transference of this feeling toward the advertiser's brand. Gilliland and Johnston (1997) explain "transformational" advertising as ads that communicate to a buying center member the emotional experience of using or associating with a product and are directly linked to brand attitude formation and high levels of recall.



As stated previously, Gilliland and Johnston (1997) assert that emotion-eliciting ads may be most effective on low-BTI viewers. They then qualify their claim by providing even though attitudes formed from peripheral ad cues tend to be weaker and shorter in duration than centrally formed attitudes, an advantage is gained by using ads with emotions since buying center members with low BTI would otherwise find little to process in the ad.

Along the same lines, advertisers may develop effective creative strategies based on the important role that situational and personal relevance play in developing BTI — by relating complex technical or industrial products or processes to a buying center member's existing situation, advertisers may enhance the member's probability of elaborating on the ad. For instance, the more a complex issue identifies with elements experienced in the member's everyday life, the more the member will be attracted to the ad and ad copy (Gilliland and Johnston, 1997).

Gilliland and Johnston (1997) offer that when the relationship among BTI and persuasion is considered, advertisers may wish to focus more heavily on users and others in the buying center that have the most to gain or lose from the purchasing decision. According to the authors, these buying center members are most likely to attempt influencing others in the buying center; thus, they should be strategically targeted by advertisers' messages.

Since media sources are consulted less frequently as the buying decision nears completion, Gilliland and Johnston (1997) urge advertisers to make their strong attitudinal impressions on high stake buying center members early in the decision process.

As a summary, Gilliland and Johnston (1997) state that a buying center member with high BTI may be best served with an ad that logically and clearly states how the product performs in respect to the most important product characteristics. In this method, the member will be able to effectively process the necessary information and relate it to his or her existing state of knowledge. Because of this processing, it is possible that the buying center member's previously held attitude will be changed.

On the other hand, buying center members with low BTI, such as members who are not familiar with a product or concept, will be less likely to process complex situation-specific arguments and may be more reachable via peripheral based cues. These cues, such as affect, emotion, or image, may allow the member to form initially favorable attitudes toward the ad, the product, or the company (Gilliland and Johnston, 1997).

### ***The Elaboration Likelihood Model of Persuasion***

Gilliland and Johnston's (1997) Business-to-business Marketing Communications Effects Model (see Figure 1) draws extensively from the Elaboration Likelihood Model of Persuasion (ELM) developed by Petty and Cacioppo (1986) (see Figure 2). The Business-to-business Marketing Communications Effects Model includes peripheral and central processing routes for brand processing. In ELM, similar concepts are referred to as the central and peripheral routes to persuasion.

### ***Along a Continuum, Two Routes to Attitude Change***

The ELM provides two routes to attitude change on the elaboration likelihood continuum—the central route and the peripheral route (see Figure 2) (Petty and Cacioppo, 1986).

The central route to persuasion views attitude change as resulting from a person's diligent consideration of information he or she feels is central to the true merits of a particular attitudinal position. Also, that attitude changes induced via the central route are relatively enduring, resistant to counterarguments (Petty and Cacioppo, 1986) and predictive of behavior (Petty, Cacioppo, Schumann, 1983).

Attitude changes that occur via the peripheral route do not occur because an individual has personally considered the pros and cons of the issue, but because the attitude issue or object is associated with positive or negative cues (Petty, Cacioppo, Schumann, 1983). Examples of peripheral cues include positive/negative affect, attractive/expert sources, the number of arguments supplied (Petty and Cacioppo, 1986) or because the person makes a simple inference about the merits of the advocated position based on various simple cues in the persuasion context (Petty, Cacioppo, Schumann, 1983). Petty and Cacioppo (1986) explain that some cues have the ability to trigger relatively primitive affective states that become associated with the attitude object.

In addition, cues (good food, expert sources, extreme positions) and inferences ("If an expert says it, it must be true") may shape attitudes or allow a person to decide what attitudinal position to adopt without the need for engaging in any extensive thought about issue- or product-relevant arguments. Because of this, attitude changes produced via the peripheral route are relatively temporary, susceptible to counterarguments (Petty and Cacioppo, 1986) and unpredictable of behavior (Petty, Cacioppo, Schumann, 1983).

The critical feature of the central route to persuasion is that an attitude change is based on a diligent consideration of information that a person feels is central to the true

merits of an issue or product. This information may be conveyed visually, verbally, or in source or message characteristics. In the peripheral route, attitudes change because of the presence of simple positive or negative cues, or because of the invocation of simple decision rules which obviate the need for thinking about issue-relevant arguments.

Stimuli that serve as peripheral cues or that invokes simple decision rules may be present visually or verbally, or may be part of source or message characteristics (Petty, Cacioppo, Schumann, 1983).

### ***Attitude and Elaboration***

Petty and Cacioppo (1986, page 127) define attitudes as “. . . general evaluations people hold in regard to themselves, other people, objects and issues. These general evaluations can be based on a variety of behavioral, affective, and cognitive experiences, and are capable of influencing or guiding behavioral, affective, and cognitive processes.” In conjunction, the first postulate of ELM is that people are motivated to hold correct attitudes because incorrect attitudes are “generally maladaptive and can have deleterious behavioral, affective, and cognitive consequences.” In simpler terms, the ELM proposes that people want to form correct attitudes (i.e., those that will be useful for functioning in one’s environment) as a result of being exposed to a persuasive communication (Petty, et al., 1991).

Petty and Cacioppo (1986) explain that the amount of elaboration a person gives to a message as a continuum going from no thought about the issue-relevant information presented to a complete elaboration of each argument and a complete integration of these elaborations into that person’s attitude schema. And, as depicted in their model in

Figure 2, the likelihood of elaboration is determined by a person's motivation and ability to evaluate the communication at hand.

Moreover, it may be that attitude effects can be arranged on a continuum depending on the elaboration likelihood of that particular persuasion situation. This continuum would be anchored at one end by the peripheral route to persuasion and at the other end by the central route to persuasion (Petty, Cacioppo, Schumann, 1983). Correspondingly, one of the tenets of ELM is that different methods of inducing persuasion may work best depending on whether the elaboration likelihood of the communication situation (i.e., the probability of message- or issue-relevant thought occurring) is high or low. When the elaboration likelihood is high, the central route to persuasion should be particularly effective, but when the elaboration likelihood is low, the peripheral route should be better (Petty, Cacioppo, Schumann, 1983).

Petty and Cacioppo (1986, page 131) realize that their message elaboration continuum discussed above more than likely coincides with how attitude change processes are developed through adulthood. In particular, they provide:

“ . . . one's initial evaluations [say as a child] are likely to be largely hedonistic since, lacking the motivation and/or ability to consider issue-relevant arguments, attitudes will be based primarily on positive and negative affective cues associated with the attitude object. As development proceeds, some attitudes may be formed on the basis of simple inferences, decision rules, and social attachments. Finally, the formation and change of some attitudes become very thoughtful processes in which issue-relevant information is carefully scrutinized and evaluated in terms of existing knowledge.”

### ***Role of Involvement***

The ELM asserts that as an issue or product increases in personal relevance or consequences, it becomes more important and adaptive to forming a reasoned and truthful opinion. Thus, people are more motivated to devote the cognitive effort required to evaluate the true merits of an issue or product when involvement is high rather than low. If increased involvement increases one's propensity to think about the true merits of an issue or product, then manipulations that require extensive issue- or product-relevant thought in order to be effective should have a greater impact under high rather than low involvement conditions. On the other hand, manipulations that allow a person to evaluate an issue or product without engaging in extensive issue- or product-relevant thinking should have a greater impact under low rather than high involvement (Petty, Cacioppo, Schumann, 1983).

In a nutshell, Petty, Cacioppo, Schumann (1983) provides the view that different features of an advertisement may be more or less effective depending upon a person's involvement with it. Under conditions of low involvement, peripheral cues are more important than issue-relevant arguments, but under high involvement, the opposite is true.

### ***Moderating Factors***

According to ELM, personal relevance or involvement is only one determinant of the route to persuasion (i.e., using the central or peripheral route to persuasion). Just as different situations may induce different motivations to think, different people may typically employ different styles of information processing and some people will enjoy thinking more than others. In addition, a diligent consideration of issue- or product-

relevant information requires not only the motivation to think, but also the ability to process the information. Other variables that may affect whether the central or peripheral route to persuasion is pursued include situational variables (distractions) and individual difference variables (prior knowledge) (Petty, Cacioppo, Schumann, 1983).

### ***Multiple Roles for Affect in Persuasion***

Petty, et al. (1991) distinguishes affect from “attitude” and “arousal.” For their purposes, affect includes emotions and relatively transient moods and feelings. In contrast, attitudes refer to global and long lasting (stored in long-term memory) evaluations of attitude objects.

Affective states may be viewed as having at least two components: intensity (the strength of the affect) and direction (positive or negative valence). Increases in the intensity of affective states may be associated with increases in physiological (autonomic, cortical) arousal but arousal is “neither a requirement for nor a reliable indicator of affect” (Petty, et al., 1991, page 184).

The ELM states that affect (like any other variable) can influence attitudes in the following ways: “a) by serving as an argument or item of issue-relevant information, b) by functioning as a simple cue, c) by influencing the extent of information processing activity, and d) by influencing the type of thoughts that come to mind” (Petty, et al., 1991, page 182). Likewise, the specific role that an affect variable plays is influenced by a person’s overall elaboration likelihood (how motivated and able are they to process the issue-relevant information that has been presented to them) (Petty, et al., 1991).

In ELM, variables [like affect] can impact persuasion by acting as persuasive arguments (providing information on the central merits of an object or issue) or by serving as simple cues that allow favorable or unfavorable attitude formation in the absence of critically thinking about the true merits of the object or issue at hand. Two other ways that a variable may impact persuasion are by “a) affecting the extent of argument elaboration (i.e., the intensity with which the person thinks about and evaluates the central merits of the issue-relevant information presented) and b) affecting the direction of any bias in elaboration (i.e., are the thoughts biased in a positive or negative direction” (Petty, et al., 1991, page 185).

When the elaboration likelihood is high, affect may serve as an argument for the merits of the attitude object. “For some people or in some situations or for certain attitude objects, a determination of the central merits of the object entails an analysis of one’s feelings rather than (or in addition to) one’s beliefs and behaviors. For example, attitudes toward a potential spouse might be based on the extent to which one feels love and warmth rather than disgust in his or her presence” (Petty, et al., 1991, page 187).

Petty, et al. (1991) provide that when people are highly motivated and have the ability to process issue-relevant arguments, affect will either serve as an argument (if it is relevant to determining the central merits of the issue) or it will bias the information processing activity: when a person is contemplating a persuasive message and is in a positive mood state the elaboration should be positively biased; when a person is in a negative mood, the elaboration should be biased in a negative fashion.

Under conditions of low elaboration likelihood (people have low motivation and ability to process a persuasive communication), if affect has any effect at all, it will be as



a simple peripheral cue. And as a cue, affect would generate change that was consistent with its direction. Or in other words, the presence of positive affect should lead to more favorable attitudes and the presence of negative affects should lead to more unfavorable attitudes (Petty, et al., 1991).

### ***Rhetorical Figures***

The use of rhetorical figures or devices in consumer advertisements is a common practice in the U.S. (Phillips and McQuarrie, 2002; Tom and Eves, 1999; McQuarrie and Mick, 1996). As previously defined, a rhetorical figure is a verbal phrase or visual image that artfully deviates from the expectation of its audience (McQuarrie and Mick, 1996, 1999) and “puts a twist on the familiar” (Tom and Eves, 1999).

Many articles have been written about the benefits of using rhetorical figures in consumer ads and published in U.S. and international academic journals (Phillips and McQuarrie, 2002; Tom and Eves, 1999; McQuarrie and Mick, 1996). There are few, however, if any, published B2B articles written about the benefits of using rhetorical figures in B2B advertising and marketing. Due to this lack of information in the academic literature, it could not be confirmed if rhetorical figures are used in B2B ads.

### ***A Taxonomy of Rhetorical Figures in Advertising***

In 1996, McQuarrie and Mick developed A Taxonomy of Rhetorical Figures in Advertising (see Figure 3), which is divided into the two figurative modes of Scheme (excess regularity) and Trope (irregularity). Scheme examples include rhyme and chime. Trope examples include metaphor, pun and irony.

McQuarrie and Mick (1999) explain that the uniqueness and power of a metaphor is its ability to create a “literally false but nonetheless illuminating equation of two different things.”

Definitions and examples of the terminology used in the taxonomy are available in the Ad Content Analysis Text (see Attachment A). Pronunciations for some of the taxonomy terminology are available in the Scheme and Trope Pronunciations (see Attachment B).

Examples of B2B ads with their taxonomical categories are available in Figures 4 through 8.

As for consumer responses to ads with rhetorical figures, McQuarrie and Mick (1996) contend that the “overcoding” of schemes adds an internal redundancy to advertising messages and that this repetition can be expected to enhance recall. On the other hand, the memorability of tropes depends upon a different mechanism—since tropes are “undercoded” they are incomplete in the sense of lacking closure and it is this lack of closure that invites elaboration by a consumer.

Elaboration indicates the amount, complexity, or range of cognitive activity stimulated by a verbal or visual rhetorical figure. In cognitive psychological terms, elaboration “reflects the extent to which information in working memory is integrated with prior knowledge structures” (MacInnis and Price 1987, p.475) (McQuarrie and Mick, 1999).

### ***Moderating Factors for Comprehending Rhetorical Figures***

Phillips and McQuarrie (2004) assert factors moderating a consumer's comprehension of rhetorical figures include competence, motivation to process, need for cognition, tolerance for ambiguity and style of processing.

Consumer competence may develop as a function of cultural assimilation, product category expertise or familiarity with that particular genre of advertising. Motivation to process may vary with consumer trait variables such as involvement, imminence of product purchase, argument strength and message relevance (Phillips and McQuarrie, 2004).

Consumers with a high need for cognition have a taste for challenging mental tasks and should be able to understand and appreciate the more complex rhetorical figures. Consumers tolerant of ambiguity will not be put off by rich visual figures that are susceptible to interpretation along multiple paths. Correspondingly, consumers that are more apt at visual processing are more likely to pursue inferences from a picture (Phillips and McQuarrie, 2004).

### ***Benefits of Using Rhetorical Figures***

Since consumers are not required to read or view an ad, an important function of the deviation of rhetorical figures is to motivate a potential reader. The motivation is spurred by the ability of a rhetorical figure to attract attention. "The rewarding character of artful deviation thus suggests that figurative ad language [and pictures], as compared with literal ad language [and pictures], should produce a more positive attitude toward the ad" (McQuarrie and Mick, 1996). Along the same line of thought, increased

enjoyment while processing an ad's text and picture makes it more probable that consumers will regard the overall ad more favorably ((McQuarrie and Mick, 1999).

Other benefits of using rhetorical figures in consumer advertisements include making the ad more interesting (McQuarrie and Mick, 1999), increased elaboration, because the consumer must figure out the ad's message, which in turn may increase the memorability of the ad, and increased consumer pleasure from "solving the puzzle" of the rhetorical device (Phillips and McQuarrie, 2004), which may increase the amount of attention a consumer gives to an ad (Phillips and McQuarrie, 2002).

An additional benefit of solving the puzzle of a rhetorical figure is the increased level of persuasion associated with a self-generated conclusion or inference about a rhetorical figure in an ad, i.e., a consumer self-generates the desired message of the ad by solving the rhetorical figure and is thereby more persuaded by the ad since they have arrived at the conclusion on their own (McQuarrie and Phillips, 2008; Phillips and McQuarrie, 2002).

### ***Negative Side of Using Rhetorical Figures***

The negative side of using rhetorical figures in ads, especially the more complex figures of metaphor and paradox, is the increased chance that a consumer may not comprehend the rhetorical figure (Phillips and McQuarrie, 2002) and therefore ignore the ad, or worse yet, be offended by the ad and its brand.

### ***Importance of Using Rhetorical Figures in Advertising***

In their Taxonomy of Rhetorical Figures in Advertising (see Figure 3), McQuarrie and Mick (1996) state that the importance of distinguishing the four rhetorical operations

of repetition, reversal, substitution and destabilization can be understood from a resource-matching perspective, which argues that persuasion attempts will be most successful when the processing demands placed on the message recipient match the processing resources that the recipient has available. Messages that place too few demands are as likely to fail as those that demand too much.

Given that effortfully processed information is more readily retrieved from memory than less effortfully processed information, McQuarrie and Mick (1996) assert that if comprehended the more cognitively demanding complex figures should also be more memorable than their simpler counterparts.

In sum, the fourfold categorization produced by differentiating schemes from tropes and simple from complex rhetorical operations makes it possible for the advertiser to accommodate audiences whose resources for processing may differ while continuing to draw on the benefits of an artfully deviant message (McQuarrie and Mick, 1996).

## ***The Neurobiology of Human Emotions and Feelings***

### ***The Importance of Understanding Human Feelings***

Antonio Damasio, author of Looking for Spinoza: Joy, Sorrow, and the Feeling Brain (2003, page 3), provides the setting for the importance of his book and ongoing research on the neurobiology of human feelings and emotions with the following statement:

Given the ubiquity of feelings, one would have thought that their science would have been elucidated long ago — what feelings are, how they work, what they mean — but that is hardly the case. Of all the mental phenomena we can describe, feelings and their essential ingredients — pain and pleasure — are the

least understood in biological and specifically neurobiological terms. This is all the more puzzling considering that advanced societies cultivate feelings shamelessly and dedicate so many resources and efforts to manipulating those feelings with alcohol, drugs of abuse, medical drugs, food, real sex, virtual sex, all manner of feel-good consumption, and all manner of feel-good social and religious practices. We doctor our feelings with pills, drinks, health spas, workouts, and spiritual exercises, but neither the public nor science have yet come to grips with what feelings are, biologically speaking.

Throughout the course of his book, Damasio lays the groundwork for a neurobiological model of human emotions and feelings and uses images of different regions of the brain activated during emotions and feelings to provide scientific support for his model.

Since its publication in 2003, Damasio's book has been cited over 2,000 times.

### ***Who is Antonio Damasio?***

"Antonio Damasio is an internationally recognized leader in neuroscience. His research has helped to elucidate the neural basis for the emotions and has shown that emotions play a central role in social cognition and decision-making. His work has also had a major influence on current understanding of the neural systems, which underlie memory, language and consciousness. Damasio directs the University of Southern California (USC) Brain and Creativity Institute" (USC web site, <http://www.usc.edu/programs/neuroscience/faculty/profile.php?fid=27>, accessed June 20, 2012).

## ***Separating Human Emotions and Feelings***

Damasio (2003) offers that since emotions and feelings are so closely related along a continuous path that humans tend to think of emotions and feelings as one thing. In contrast to this opinion, and to assist his research on human emotions and feelings, Damasio separates emotions and feeling into two separate research objects (page 28).

Another commonly held human viewpoint is feelings occur before emotions and emotions are the expression of feelings. According to Damasio, however, emotions precede feelings since evolution engineered emotions — the reactions that support the survival of an organism — first and then feelings later (page 29).

Damasio asserts that human beings have nested levels of automated homeostatic regulation and that these levels range from simple to complex (see Figure 9). He describes emotions-proper as the “crown jewel of automated life regulation: emotions in the narrow sense of the term — from joy and sorrow and fear, to pride and shame and sympathy” (page 34). He explains that the reactions stemming from the level of emotions-proper, and therefore all the levels contained within it, are directly or indirectly geared towards regulating life processes and promoting survival, i.e., by keeping dangers away, taking advantage of opportunities and facilitating social interactions (page 39). Moreover, that these reactions strive to promote a life that is better than neutral; a positively regulated life that offers a state of wellness and well-being (page 35).

Above, and including the level of emotions-proper, is the level of feelings (see Figure 10). According to Damasio, feelings provide another level of homeostatic

regulation and are “a mental expression of all other levels of homeostatic regulation” (page 37).

### ***Emotions-Proper***

Damasio divides emotions-proper into three different categories: background emotions, primary emotions and social emotions (page 43) (see Figure 11). He describes background emotions as the consequence of ongoing regulatory activities nested below the level of emotions: basic homeostatic processes, pain and pleasure behaviors, and drives and motivations. According to Damasio, when humans are asked how they feel they consult their “state of being,” made up from their background emotions, and answer properly (page 44).

Primary emotions include fear, anger, disgust, surprise, sadness and happiness. Social emotions include sympathy, embarrassment, shame, guilt, pride, jealousy, envy, gratitude, admiration, indignation and contempt. In following the nesting principle, social emotions encompass responses from primary and background emotions (Damasio, page 44-45).

Damasio outlines his working hypothesis of emotions-proper in the form of a definition (page 53):

1. An emotion proper, such as happiness, sadness, embarrassment, or sympathy, is a complex collection of chemical and neural responses forming a distinctive pattern.
2. The responses are produced by the normal brain when it detects an emotionally competent stimulus, the object or event whose presence, actual or in mental recall, triggers the emotion. The responses are automatic.
3. The brain is prepared by evolution to respond to certain emotionally competent stimuli with specific repertoires of action. However, the list of emotionally competent stimuli is not confined to those prescribed by evolution. It includes many others learned in a lifetime of experience.



4. The immediate result of these responses is a temporary change in the state of the body proper, and in the state of the brain structures that map the body and support thinking.
5. The ultimate result of the responses, directly or indirectly, is the placement of the organism in circumstances conducive to survival and well-being.

Damasio explains that this process begins with an appraisal-evaluation phase, starting with the detection of an emotionally competent stimulus.

Damasio states that “emotions provide a natural means for the brain and mind to evaluate the environment within and around the organism, and respond accordingly and adaptively.” He also provides that a human can regulate their emotional responses by using their educational development to interject a non-automatic evaluative step between an emotionally competent stimulus (ECS) and its emotional response (page 54).

Damasio makes the point that in order for emotions to occur there is no need for humans to analyze an object consciously or evaluate the situation in which it appears. “. . . even when the emotional reaction occurs without conscious knowledge of the ECS the emotion signifies nonetheless the result of the organism’s appraisal of the situation” (page 55). Damasio explains a bit more by providing that emotionally competent stimuli are detected very fast and before selective attention kicks in. Or, in other words, whether or not a human being is paying attention, emotionally competent stimuli can be detected by the human brain. Subsequently, attention and proper thought can be diverted to these stimuli (page 60).

Damasio contends that for humans there are very few or perhaps no objects in the world that are emotionally neutral. “Some objects evoke weak, barely perceptible

emotional reactions, some objects evoke strong emotional reactions, and there is every other grade in between” (page 56).

### ***Triggering and Executing Emotions***

Damasio explains in neural terms images related to an “emotionally competent object” must be represented in one or more of the brain’s sensory processing systems such as the visual or auditory regions. He calls this the presentation stage of the process (page 57/58).

Irrespective of how short lived the images are in the presentation stage, Damasio states that signals related to the presence of that stimulus are made available to a number of emotion-triggering sites elsewhere in the brain. These emotion-triggering sites then activate a number of emotion-execution sites somewhere else in the brain. According to Damasio, these latter sites are the immediate cause of the emotional state that occurs in the body and in brain regions that support the emotion-feeling process (page 58).

Damasio stipulates there is multiple emotion triggering and execution sites in the human brain (see Figure 12). Emotion triggering sites include parts of the amygdala and the ventromedial prefrontal cortex. A large variety of emotions can be triggered when activity elsewhere in the brain induces activity in one of the triggering sites. None of the triggering sites, however, produce an emotion by itself. According to Damasio, for an emotion to occur an emotion-triggering site must cause subsequent activity in other emotion-execution sites like the basal forebrain, hypothalamus, or nuclei of the brainstem (page 59).

The ventromedial prefrontal region (see Figure 12) is also tuned to detect the emotional significance of more complex stimuli (natural or learned objects and situations) capable of triggering social emotions. For example, the sympathy evoked by witnessing someone else's accident, as well as the sadness evoked by one's personal loss, require the mediation of this region. Likewise, many of the stimuli that acquire their emotional significance in one's life experiences trigger the respective emotions via this region (Damasio, page 61).

### ***Feelings***

Before defining feelings, Damasio explains that a human brain creates maps of its body's parts and states and how they are functioning (page 87). The brain creates these maps by surveying "the entire [human] organism, locally and directly — via nerve endings — and globally and chemically — via the bloodstream" (page 126). As an example, Damasio uses the composition of human blood in relation to the chemical molecules that humans depend on for life — the concentration of these molecules are represented (mapped) at all times in specific regions of the brain.

Damasio then defines human feelings as the mental perception or idea of a body's particular state and that the perception or idea is based on the maps generated by specific areas of the human brain. Correspondingly, "the immediate substrates of feelings are the mappings of myriad aspects of body states in the sensory regions [of the brain] designed to receive signals from the body" (page 87). In addition, since human feelings are based on the brain's body maps, it follows that feelings may arise from emotions-proper and any set of homeostatic reactions [also remember how homeostatic regulations and emotions are nested in feelings (see Figure 10)] (page 85).

In more detail, Damasio explains that the “substrate of feelings is the set of neural patterns that map the body state and from which a mental image of the body state can emerge. A feeling in essence is an idea—an idea of the body, and even more particularly, an idea of a certain aspect of the body, its interior, in certain circumstances. A feeling of emotion is an idea of the body when it is perturbed by the emoting process” (page 88).

Damasio provides that some level of pleasure or pain is a consistent part of feelings (page 85) and that a feeling “is the perception of a certain state of the body along with the perception of a certain mode of thinking and of thoughts with certain themes” (page 86). He explains that feelings emerge when the “sheer accumulation of mapped details reaches a certain stage” (page 86).

Damasio closes this book section with the thought that few, if any, perceptions of objects or events, actually present or recalled from memory, are ever neutral in emotional terms — through either innate design or by learning, humans react to most, if not all, objects with emotions, however weak, and subsequent feelings, however feeble (page 93).

### ***Feelings in the Brain: New Evidence***

The main somatosensing regions in a human brain, from the level of the brain stem to the cerebral cortex, are viewable in Figure 13. [Somatosensory is defined as having to do with sensory signaling from any part of the body (soma) to the central nervous system (Damasio, page 336).] Normal feelings of emotion require the use of all these regions, however, some regions, i.e., the insula, cingulate cortex, and brain stem

nuclei, are more important than others. According to Damasio, the insula may be the most important of all (page 97).

To verify their hypothesis that feelings are related to neural mappings of body states, Damasio and his research team conducted an investigation of the patterns of brain activity that occur in association with feeling certain emotions. The hypothesis that guided their work stated that when “feelings occur there is a significant engagement of the areas of the brain that receive signals from varied parts of the body and thus map the ongoing state of the organism” (page 96/97). To test the hypothesis, Damasio and his team studied the patterns of activity in the brains of more than 40 people evenly divided by gender while they experienced one of four possible feelings: happiness, sadness, fear, or anger.

Their investigation measured the amount of blood flow in multiple brain areas using an imaging technique called positron-emission tomography or PET. The team chose this method because it is known that the amount of blood flowing into any region of the brain is closely correlated with the metabolism of the neurons in that region, and the metabolism, in turn, correlates with the amount of local activity of the neurons (page 97).

An analysis of the investigational data collected offered ample support for Damasio’s hypothesis:

All the body-sensing areas under scrutiny — the cingulate cortex, the somatosensory cortices of insula and SII [S2], the nuclei in the brain stem tegmentum — showed a statistically significant pattern of activation or

deactivation. This indicated that the mapping of body states had been significantly modified during the process of feeling. Moreover, as we expected, these patterns of activation or deactivation varied among the emotions. In the same way that one can sense that our bodies are differently conformed during the feeling of joy or sadness, we were able to show that the brain maps corresponding to those body states were different as well (page 99/100).

The brain regions activated during feelings of joy in a PET imaging experiment are viewable in Figure 14:

The two panels on the right of the figure show a medial (internal) view of the right hemisphere (top) and the left hemisphere (bottom). There are significant changes in activity in the anterior cingulate (ac), posterior cingulate (pc), the hypothalamus (hyp), and the basal forebrain (bf). The four panels on the left depict the brain in axial (near horizontal) slices. The right hemisphere is marked R and the left L. Note the significant activity in the region of the insula (in), shown in two slices and in both right and left hemispheres, and in the posterior cingulate (pc), also shown in two slices (Damasio, page 99).

Brain maps from the same PET imaging experiment corresponding to feelings of sadness [sorrow] are viewable in Figure 15. "There is significant activity in the insula (in), again in both hemispheres and in more than one slice, and it differs from the condition of joy. The same applies to the significant changes in the anterior cingulate (ac)" (Damasio, page 100).

From his investigations and research, Damasio concludes that the “somatosensing regions in the [human brain] appear to be a critical substrate for feelings, and the insular cortex appears to be the pivotal region of the set. [In addition], this notion, no longer a mere hypothesis, constitutes a platform from which a new level of inquiry can be launched into the finer neurobiology of feelings in the years ahead” (page 106).

### ***What are Emotions and Feelings For?***

In agreement with the philosophers Aristotle, Spinoza, de Sousa and Nussbaum, Damasio (2003) asserts that emotions are “inherently rational” (page 150), and that in this context, “the term rational does not denote explicit logical reasoning but rather an association with actions or outcomes that are beneficial to the organism exhibiting emotions” (page 150).

Damasio contends that humans do far more than respond automatically to components of a social situation with the collection of innate emotions. Rather, under the influence of social emotions and those emotions caused by punishment and reward, humans gradually categorize the situations they experience — the structure and components of the setting and the significance of the situation in respect to their personal story. In addition, humans connect the conceptual categories they form, mentally and at the associated neural level, with the part of the brain used for triggering emotions. “By virtue of those associations, when a situation that fits the profile of a certain category is revisited in our experience, we rapidly and automatically deploy the appropriate emotions” (Damasio, page 146/147).

Damasio states that the stimulation of an emotional signal accomplishes a number of important tasks. “Covertly or overtly, it focuses attention on certain aspects of the problem and thus enhances the quality of reasoning over it” (page 147).

Damasio also explains that the emotional “signal marks options and outcomes with a positive or negative signal that narrows the decision-making space and increases the probability that the action will conform to past experience” (page 148). Because these signals are related to the human body, Damasio refers this process as the “somatic-marker hypothesis.” However, according to Damasio, “the emotional signal is not a substitute for proper reasoning. It has an auxiliary role, increasing the efficiency of the reasoning process and making it speedier” (page 148).

Damasio elaborates that somatic markers indicate to a human whether the outcome to a certain action is “good” or “bad” for their environment and thus reduces the number of alternatives a human has to consider or choose from when making a decision. According to Damasio, the automatic processing of somatic-markers “drastically reduces the number of [viable] options” that a human has to consider when making a decision (Damasio, 1994, page 173).

The evidence that formed the basis for Damasio’s somatic-marker hypothesis is laid out in his 1994 book Descartes’ Error: Emotion, Reason and the Human Brain. The scientific basis for his hypothesis is based on test results of subjects with frontal lobe brain damage. The test results show that subjects with this form of brain damage cannot use their emotions and feelings when making a decision. The absence of emotions and feelings in the decision making process results in subjects requiring an inordinate



amount of time to make a decision and often times arriving at a decision that is not rational, i.e., not beneficial to their continued positive existence.

Since its publication in 1994, Damasio's book has been cited over 13,000 times.

As for the neural maps produced by the human brain and representing the state of varied body systems every second, Damasio states that they are needed by the brain to coordinate the countless body functions on which human life depends (page 176).

Even though neural body-state maps are critical for controlling and maintaining human life, Damasio explains that they can only provide limited help without conscious feelings. "The maps work for problems of a certain degree of complexity and no more; when the problem gets too complicated — when it requires a mixture of automated responses and reasoning on accumulated knowledge — unconscious maps no longer help and feelings come in handy" (page 176/177).

The fact that feelings are mental events is also pertinent for the following reason:

Feelings help us solve nonstandard problems involving creativity, judgment, and decision-making that require the display and manipulation of vast amounts of knowledge. Only the "mental level" of biological operations permits the timely integration of large sets of information necessary for the problem-solving processes. Because feelings have the requisite mental level, they can enter the mind fray and influence operations (Damasio, page 177).

In evolutionary terms, Damasio explains that evolution seems to have built the machinery of emotions and feelings at different times:

First came the machinery for producing reactions to an object or event, directed at the object or at the circumstances — the machinery of emotion. Second came the machinery for producing a brain map and then a mental image, an idea, for the reactions and for the resulting state of the organism — the machinery of feeling. . . . The second device, feeling, introduced a mental alert for the good or bad circumstances and prolonged the impact of emotions by affecting attention and memory lastingly (page 80).

As for the relevance of emotions and feelings to each and every human, Damasio best summarizes this with the following quote:

One might summarize by saying that feelings are necessary because they are a mental-level expression of emotions and what lies beneath them. Only at that mental level of biological processing and in the full light of consciousness is there sufficient integration of the now, the past and the anticipated future. Only at that level is it possible for emotions to create, via feelings, the concern for the individual self (page 178).

## ***Methods***

To determine if rhetorical figures are currently used in B2B advertisements and answer research question 1), content analysis was conducted on full page ads from a B2B online trade journal and in-depth interviews were conducted with three B2B advertising executives. In-depth interviews with advertising executives were conducted to answer research question 2). Research question 3) was answered by in-depth

interviews with advertising executives and a subsequent second in-depth interview with an advertising executive.

### ***Ad Content Analysis***

The March 2012 and September 2011 issues of the B2B trade journal Medical Design were selected for conducting the ad content analysis. The Medical Design trade journal was selected for ad content analysis because this was the first online trade journal that the author was able to locate that did not charge a monetary fee to access its digital issues and also provided PDF downloads of its ads. The journal was located at the [medicaldesign.com](http://medicaldesign.com) web site. The issues of March 2012 and September 2011 were chosen to collect a “snapshot” of the use of rhetorical figures in a B2B trade journal in the last year (from March 2012) and to verify that B2B trade journals are currently using rhetorical figures in their ads.

The ad content analysis design primarily follows the format developed by Phillips and McQuarrie (2002) (see Attachment A, Ad Content Analysis Text), which uses the rhetorical figure taxonomy developed by McQuarrie and Mick (1996) (see Figure 3).

As stated earlier, definitions and examples of the terminology used in the rhetorical figure taxonomy developed by McQuarrie and Mick (1996) is available in the Ad Content Analysis Text (see Attachment A). Pronunciations for some of the taxonomy terminology are available in the Scheme and Trope Pronunciations (see Attachment B).

The first ad content analysis was conducted by Jennifer Grasswick. To confirm the precision of the coding completed by Grasswick, a second ad content analysis was conducted by Anthony Froelich.

## ***In-depth Interviews***

### ***Round One Interviews***

The following B2B advertising executives were selected for in-depth interviews: Chris Schermer, President, Schermer Advertising Agency, Minneapolis, MN; Paul Chapin, Co-owner and Chief Executive, Initio Advertising, Minneapolis, MN; and Susan McPherson, President, Creative Communications Consultants, Inc., Minneapolis, MN. All interviews were conducted in person in their offices.

Orange Communications and StoneArch Creative, both B2B agencies in Minneapolis, MN, were also contacted for in-depth interviews. Orange Communications declined the interview as their specialty is B2B public relations. The staff member from StoneArch Creative did not return the author's phone call requesting an interview; in total, three messages (voice and email) were left for the staff member.

Schermer, Chapin and McPherson were selected for an in-depth interview because they agreed to the interview and based on the focus of their advertising and marketing agencies: Schermer is a Minneapolis-based, globally-focused agency specializing in marketing, branding and interactive campaigns and consulting for companies that market business-to-business; Initio Advertising is full-service agency offering services in advertising and design, media and marketing services and digital media for consumer and B2B clients; and Creative Communications Consultants, Inc. is a full-service advertising and public relations agency specializing in marketing communications for business-to-business marketers—including industrial, commercial and high-technology companies.

Chris Schermer was interviewed April 23, 2012, for approximately 45 minutes. Paul Chapin was interviewed April 24, 2012, for approximately 50 minutes. Susan McPherson was interviewed April 25, 2012, for approximately 30 minutes. A second interview with McPherson was conducted June 14, 2012, for approximately 30 minutes. All interviews were held at the respective advertising agencies.

### ***Round Two Interview***

As stated previously, research question 3) was answered by in-depth interviews with three advertising executives and a subsequent second in-depth interview with an advertising executive. The advertising executive was Susan McPherson. McPherson was selected for a second interview because in her first interview she stated her agency uses the individual buying center member roles of “influencer,” “purchaser,” “specifier” and “champion,” which are similar to the terminology the Business-to-business Marketing Communications Effects Model uses to describe roles of buying center members: “initiator,” “buyer,” “decision maker,” “user,” “influencer,” and “gatekeeper” (Gilliland and Johnston, 1997).

## ***Results***

### ***Ad Content Analysis***

#### ***Medical Design Trade Journal, March 2012 Ad Statistics***

##### ***Grasswick Ad Content Analysis***

Of the 10 full-page ads in the issue, eight included a verbal rhetorical figure in the headline; four included a verbal rhetorical figure in the body copy; and two contained a visual rhetorical figure in the picture (see Tables 1, 2, and 3).

Categories of verbal rhetorical figures in the headline included anaphora: one, anadiplosis: one, rhetorical question: one, metaphor: one, homonym: one, and resonance: three. Categories of verbal rhetorical figures in the body copy included antithesis: two, metaphor: one, homonym: one, and resonance: two. Two of the ads used two rhetorical figures in their body copy.

The two ads that used a visual rhetorical picture used the categories of metaphor and paradox. Three of the ads used layering and five of the ads were anchored.

##### ***Froelich Ad Content Analysis***

Of the 10 full-page ads in the issue, eight included a verbal rhetorical figure in the headline; five included a verbal rhetorical figure in the body copy; and five contained a visual rhetorical figure in the picture (see Tables 7, 8, 9).

Categories of verbal rhetorical figures in the headline included anaphora: two, metaphor: one, antanaclasis: one, and resonance: four. Categories of verbal rhetorical figures in the body copy included antanaclasis: two, resonance: two and irony one.

The five ads that used a visual rhetorical picture used the categories of metaphor: one, resonance: three and irony: one. Three of the ads used layering and five of the ads were anchored.

### ***Medical Design Trade Journal, September 2011 Ad Statistics***

#### ***Grasswick Ad Content Analysis***

Of the 17 full-page ads in the issue, 11 included a verbal rhetorical figure in the headline; five included a verbal rhetorical figure in the body copy; and five contained a visual rhetorical figure in the picture (see Tables 4, 5, and 6).

Categories of verbal rhetorical figures in the headline included chime: four, anaphora: one, parison: one, antithesis: one, rhetorical question: one, ellipsis: two, metaphor: one, homonym: one, and resonance: two. Two of the ads used multiple figures. Categories of verbal rhetorical figures in the body copy included chime: one, anadiplosis: one, antithesis: one, ellipsis: one, and metaphor: one.

The five ads that used a visual rhetorical figure in a picture used the categories of metaphor four times and paradox one time. Five of the ads used layering and six of the ads were anchored.

#### ***Froelich Ad Content Analysis***

Of the 17 full-page ads in the issue, 13 included a verbal rhetorical figure in the headline; 10 included a verbal rhetorical figure in the body copy; and nine contained a visual rhetorical figure in the picture (see Tables 10, 11, and 12).

Categories of verbal rhetorical figures in the headline included anaphora: one, parison: one, antithesis: two, ellipsis: one, metaphor: two, and resonance: seven. Ad number 16 used two rhetorical figures. Categories of verbal rhetorical figures in the body copy included anadiplosis: one, parison: one, antanaclasis: one, resonance: four, paradox: two and irony: one.

The nine ads that used a visual rhetorical figure in a picture used the categories of metaphor: one, resonance: seven and irony: one. Five of the ads used layering and six of the ads were anchored.

## ***In-depth Interviews with B2B Advertising Executives***

### ***Round One Interviews***

The three in-depth interviews with Schermer, Chapin and McPherson provided the following information: 1) each of the three advertising agencies routinely use rhetorical figures in their B2B ads; 2) many of the same advertising principles apply whether it is B2B or B2C advertising; 3) the main goal of an advertisement, whether it is B2B or B2C, is to try and get a person to feel something that is tied to emotion “and even more so to instinct, either to avoid pain or gain pleasure,” says Schermer; and 4) the B2B buying center differentiates B2B advertising and marketing from B2C advertising and marketing.

### ***Round Two Interview***

The second interview with McPherson clarified that her agency’s individual buying center member roles and names are not the same as the roles and names outlined in the Business-to-business Marketing Communications Effects Model. To



illustrate one of the differences, McPherson provided that for her agency the role of “influencer” is a buying center member who can’t say “yes” to a product purchase but can say “no” to that purchase.

McPherson explains that an influencer has an opinion about what product should be purchased and expresses their opinion to the buying center member who is making the specifying or purchasing decision—the influencer can say “no” to a purchase by persuading a buying center member to buy a different product than originally planned. In contrast, the role of influencer in the Business-to-business Marketing Communications Effects Model is that of the buying center member who has the most to gain or lose by a purchasing decision and who will exert their influence extensively on other members to ensure that the purchasing decision made is in their best interests.

## ***Discussion***

### ***Answers to Research Questions***

#### ***Research Question 1)***

How are verbal and visual rhetorical figures used in B2B ads?

The sampling of ads from the Medical Design trade journal verify that rhetorical figures are currently being used in the medical device industry B2B trade journals.

The ad content analyses conducted by Grasswick and Froelich on the March 2012 online issue of Medical Design (see Tables 1, 2 and 3 and 7, 8 and 9, respectively) were quite similar in the number of verbal rhetorical figures counted in the headline and

the number of verbal rhetorical figures counted in the body copy. The two content analyses were not similar for the number of visual rhetorical figures counted in the picture.

As for the specific rhetorical figure category chosen for the number of verbal rhetorical figures included in the headline, Grasswick's and Froelich's selections were similar in that they selected the category of resonance, three, and resonance, four, respectively. Otherwise, their categorical selections were not similar. For the specific rhetorical figure category chosen for the number of verbal rhetorical figures in the body copy, Grasswick and Froelich each selected resonance two times. Their other selections did not match. For the number of visual rhetorical figures in the picture, Froelich counted five and Grasswick selected two.

Differences in the results of the two ad content analyses may be attributed to different genders (male and female), previous life experiences and current likes and dislikes.

The ad content analyses conducted by Grasswick and Froelich on the September 2011 online issue of Medical Design (see Tables 4, 5, and 6 and 10, 11, and 12, respectively) were similar in the number of verbal rhetorical figures counted in the headline. The two content analyses were not similar for the number of verbal rhetorical figures counted in the body copy and the number of visual rhetorical figures counted in the picture.

As for the specific rhetorical figure category chosen for the number of verbal rhetorical figures included in the headline, Grasswick and Froelich both selected similar

amounts of the categories of anaphora, parison, antithesis, ellipsis and metaphor. They were, however, quite disparate in the number of times they counted the rhetorical figure of resonance. For the specific rhetorical figure category chosen for the number of verbal rhetorical figures in the body copy, Grasswick and Froelich each selected anadiplosis one time. Their other selections did not match. Froelich and Grasswick had widely varying responses to the number and category of visual rhetorical figures in the picture.

Differences in the results of the two ad content analyses may be attributed to different genders (male and female), previous life experiences and current likes and dislikes.

The two ad content analyses reveal that the majority of rhetorical figures used in B2B ads are verbal rhetorical figures in the headline. Grasswick's ad content analysis brought forth that the second common rhetorical figure in use was a verbal rhetorical figure in the body copy. In third place, was the use of visual rhetorical figures in pictures. Froelich's ad content analysis placed the use of visual rhetorical figures in pictures as the second most commonly used rhetorical figure. In third place, was the use of verbal rhetorical figures in the body copy.

The category of verbal rhetorical figures in the ad headline and body copy was wide spread whereas the category of the visual rhetorical figure in the ad picture was primarily resonance or metaphor. The use of layering and anchoring in the ads was small but consistent among the two issues samples.

### ***Research Question 2)***

Why are verbal and visual rhetorical figures used in B2B ads?

As stated previously, the three advertising executives interviewed agree that the main goal of an advertisement, whether it is B2B or B2C, is to try and get a person to feel something that is tied to emotion “and even more so to instinct, either to avoid pain or gain pleasure,” says Schermer.

Schermer elaborates on the instinct either to avoid pain or gain pleasure by explaining that he has “a lot of clients who don’t want to emphasize the pain of the situation because they want their brands associated with the positive. But a lot of what people do with their products or services is that they will alleviate a problem. So one of the things we can do from an advertising stand point is to show a problem in a way that is engaging, that somebody responds to, and has that emotional response: ‘Yeah, that’s my day, that’s my life.’ And, oftentimes, these rhetorical figures are the fastest way to do this because they access an area of your brain beyond just the rational. That’s why visual images are even better than headline copy for triggering something that is deeply felt.”

Along the same line of thought, Chapin explains that “from an advertising perspective we are always trying to differentiate one brand from the next . . . and I think these [rhetorical figures] are sometimes the quickest tools in the toolbox to try and differentiate yourself if you can figure out a way to say something in a way that has not been said before.”

When asked if a person can have a cognitive and emotional response to an ad, especially if the ad uses rhetorical copy [text] or figures, McPherson responded, “Yes, because the whole point of the rhetorical is to create a feeling or an attitude before you provide information.”

Chapin offers there are a lot of similarities in B2B and B2C ads because “at the end of the day, you are still communicating to people, still communicating to their emotions, to their hopes and fears, objectives, whatever happens to drive them.” As for the use of verbal and visual rhetorical figures, Chapin states, “We use all of those tools whether it is a business trade campaign or a consumer campaign. There really is not any difference in our perspective.”

### ***Research Question 3)***

How does the Business-to-business Marketing Communications Effects Model relate to current practices of B2B advertising agencies?

As for the unique challenge of dealing with a B2B buyer center, Schermer states that his agency creates messaging platforms. These platforms start with a foundational brand element and messaging elements and then segment into what his company calls “upstream” (CEO, president), “midstream” (director, operational manager) and “downstream” buyers (operational users). For the “forward looking” upstream segment, the agency emphasizes business benefits, competitive advantage and profitability. The attention of the “present view” midstream level is caught by emphasizing operational advantages and productivity. The downstream section is the operational users and responsible for evaluating the features and functionality of a product. This segment has more of a “backward” view and tends to think about what they did before, what they are doing currently, and how is this going to change their job, team and how they do things. “So you have to change the way they think about the problem in terms of this being a solution to it [the problem],” said Schermer.

Overall, Schermer explains that upstream his agency is inclined to talk more about the pleasure principle and that the further downstream they go the more they talk about the alleviation of pain.

In the scenario of company A and company B and company A wants to sell to company B, Chapin and his agency approach the B2B buying center challenge by first asking company A about company B's needs and stakeholders while keeping in mind that their client, company A, is the true decision maker in this setting. Chapin's agency then proceeds with a holistic approach: they ask company A "what is your message to the different stakeholders of company B's buying center?" and next inform company A that they need to have "a brand and a brand position that touches each of these constituencies."

Chapin states that his agency and company A need to talk to company B as a "single group or voice." In addition, even though there are different groups that need to be identified inside the selling process, there "really needs to be a brand approach from company A to company B just like it would be from the business to consumer side."

McPherson's approach to working with the challenge of a B2B buying center is to conduct extensive research first to determine what roles are being carried out by the individual members of the buying center and then to produce and place advertising appropriate for the different roles within the buying center. Roles that her agency focuses on are "influencer," "purchaser," "specifier," "user," and "champion."

To explain how they use buying center member roles to advertise to members of a B2B buying center, McPherson provides the following example: A building buying

center is purchasing a heating, ventilation, and air conditioning (HVAC) unit. The member who makes the specification is the consulting engineer. He is the member who says “here, this is what we should buy.” This member makes the recommendation; he is the specifier. The purchaser member is the contractor who actually buys the HVAC unit. The user is the member who will actually use or maintain the HVAC in the building. The influencer is the building owner who has to approve the purchase of the unit. The influencer does not buy the product or specify (recommend) the product but he or she can say no to the purchase—they are an important member of the buying center. According to McPherson, since each member in the buying center has a different role, they develop a slightly different advertising message for each member.

McPherson explains that another important person in the selling process is the champion. A champion is an individual to whom the purchase matters the most and it could be an influencer, buyer or user. McPherson states that the champion is a person they want to identify, however, they cannot predict who this person will be in a buying center [because of the complexities of a B2B buying center].

In terms of how her agency determines what B2B job functions fit into what roles, McPherson relies on the Business Publications Association’s audits of trade journals (which helps to certify that who the publisher says is reading the magazine is reading the magazine). “The Business Publications Association audits are extremely important to us because they actually identify the job functions.”

As for the overall Business-to-business Marketing Communications Effects Model, which results in a purchasing process, McPherson states that her agency’s work

is at the awareness and interest generating stage—they can generate interest and get information to people but they can't sell products.

The Business-to-business Marketing Communications Effects Model states that a B2B buying member has an emotional response, via the peripheral route of processing, then an attitude toward the ad and then an attitude toward the brand. McPherson thinks that this is not a one-way process and that it may just as easily work in the other direction (an attitude toward a brand can affect an attitude toward an ad).

The Business-to-business Marketing Communications Effects Model also provides that emotionally eliciting ads may be most effective on low BTI viewers. McPherson did not agree with this statement. "I think what they really mean is emotionally eliciting ads are less effective on high involvement viewers, which is a different thing than saying its most effective on low. Because I need to know more, if I am really involved in this, I just can't have a feeling about it. If I am only peripherally involved, then how I feel about it is fine. But if I really care, I need information not just some sort of feeling."

Of the three approaches (Schermer, Chapin and McPherson) to addressing the challenges of advertising and marketing to a B2B buying center, McPherson's approach of using buying center member roles is the most similar to the Business-to-business Marketing Communications Effects Model and their use of member roles.



## A Modified Business-to-business Marketing Communications Effects Model

A modified Business-to-business Marketing Communications Effects Model has been developed (see Figure 16 below) to fulfill the need for a B2B communications model that more accurately represents how members of a buying center use emotions and feelings to process an ad and brand and form  $A_{ad}$  and  $A_{brand}$ .

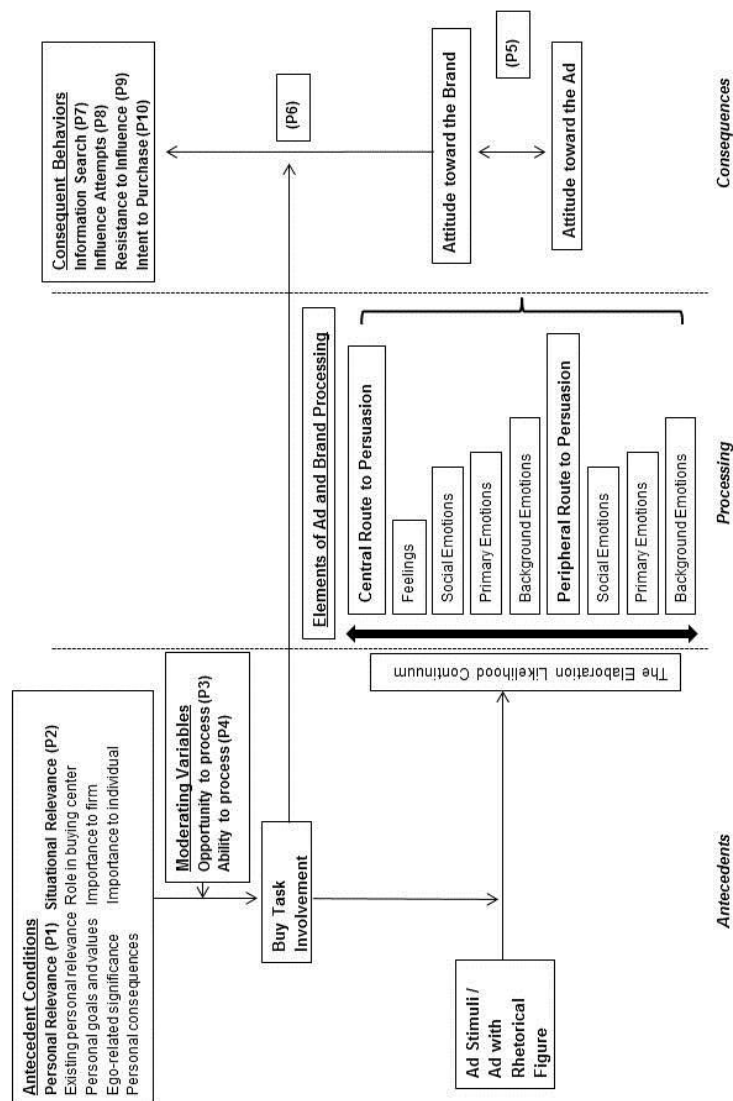


Figure 16. The Grasswick Business-to-business Marketing Communications Model. Model adapted from Gilliland and Johnston (1997).

The modified model, called the Grasswick Business-to-business Communications Model, proposes that a member of a buying center uses emotions (background, primary and social) to process an ad through the peripheral route to persuasion and emotions (background, primary and social) and feelings to process an ad through the central route to persuasion. The model offers that a buying center member can form either an  $A_{ad}$  or  $A_{brand}$  after processing an ad and  $A_{ad}$  and  $A_{brand}$  may affect the formation of each other. The model incorporates the use of ads with rhetorical figures.

The Grasswick Business-to-business Communications Model also amends Propositions 5, 6 and 7 of the Business-to-business Marketing Communications Effects Model as follows:

P5: Those with high BTI will process an ad by the central route to persuasion and will potentially experience a more enduring  $A_{ad}$  and  $A_{brand}$  than those with low BTI who will process the ad by the peripheral route to persuasion.

P6: In buying center situations, BTI moderates  $A_{ad}$  and  $A_{brand}$  and the consequent behaviors linkage.

P7: Buying center members with a strongly positive  $A_{ad}$  and/or  $A_{brand}$  and a high level of BTI

e) will seek more information,

f) will seek more evaluative information,

g) are more selective in their information search, and

- h) are better able to learn additional information than other buying center members.

## ***Support for a Modified Business-to-business Marketing Communications Effects Model***

### ***The Neurobiology of Human Emotions and Feelings***

Support for a modified Business-to-business Marketing Communications Effects Model can be drawn from three segments of Damasio's neurobiological model of human emotions and feelings (1994, 2003).

As a reminder, Damasio states that "emotions provide a natural means for the brain and mind to evaluate the environment within and around the organism, and respond accordingly and adaptively" (2003, page 54). Also, that "the ultimate result of [emotional] responses, directly or indirectly, is the placement of the organism in circumstances conducive to survival and well-being" (2003, page 53).

The first relevant segment of Damasio's model is the "somatic-marker" hypothesis. The hypothesis proposes that because of emotions and their marking of possible options and outcomes as "good" or "bad" — which reduces the number of alternatives that have to be considered — humans can reason more efficiently and make decisions quicker (Damasio 2003, page 148). For the Grasswick Business-to-business Communications Model, the somatic-marker hypothesis supports the use emotions in the central route to persuasion (attitude change is based on diligently thinking about issue-relevant arguments, Petty, Cacioppo, Schumann, 1983).

That emotions are involved in both the peripheral and central routes to persuasion is supported by Damasio's stance that for humans there are very few or perhaps no objects in the world that are emotionally neutral. "Some objects evoke weak, barely perceptible emotional reactions, some objects evoke strong emotional reactions, and there is every other grade in between" (2003, page 56).

The second pertinent segment of Damasio's model is the ability of feelings — the mental-level expression of emotions — to sufficiently integrate a human's past, present and anticipated future. Only at this level, Damasio claims, is it possible for emotions to create, via feelings, the concern for the individual self (page 178).

The third segment of Damasio's model is that feelings are mental expressions of all other levels of homeostatic regulation including emotions (see Figure 10) (2003, page 37) that help humans solve problems requiring decision-making, creativity and judgment (2003, page 177). Damasio also maintains that few, if any, perceptions of objects or events, actually present or recalled from memory, are ever neutral in emotional terms — through either innate design or by learning, humans react to most, if not all, objects with emotions, however weak, and subsequent feelings, however feeble (2003, page 93).

In regards to the Grasswick Business-to-business Communications Model, the above viewpoints all support the use of emotions and feelings in the central route to persuasion and the use of emotions in the peripheral route to persuasion.

## ***The Elaboration Likelihood Model of Persuasion***

Support for a modified Business-to-business Marketing Communications Effects Model may be derived from different versions of the Elaboration Likelihood Model of Persuasion or ELM.

As a reminder, in ELM, Petty, et al. (1991) defines “affect” as including emotions and relatively transient moods and feelings.

As previously written, Gilliland and Johnston’s (1997) Business-to-business Marketing Communications Effects Model (see Figure 1) draws extensively from the Elaboration Likelihood Model of Persuasion developed by Petty and Cacioppo (1986) (see Figure 2). To be more specific, Gilliland and Johnston’s model follows an early (late 1970’s, early 1980’s) version of Petty and Cacioppo’s model that categorizes emotions (positive or negative affect) as cues in the peripheral route to persuasion. Over the years, however, the model has changed or perhaps matured.

The 1991 version of Petty and Cacioppo’s model (Petty, et al., 1991) states that affect (like any other variable) can influence attitude persuasion by serving as an argument or item of issue-relevant information processed through the central route to persuasion (and thus connected with a high likelihood of elaboration) or by functioning as a simple cue processed via the peripheral route to persuasion (and hence coupled with a low likelihood of elaboration). The more recent version of the model also provides that variables like affect can impact persuasion by acting as persuasive arguments (providing information on the central merits of an object or issue) or by serving as simple cues that allow favorable or unfavorable attitude formation in the absence of critically thinking about the true merits of the object or issue at hand (Petty, et al., 1991). For the

Grasswick Business-to-business Communications Model, these points of view support the use of emotions in the central and peripheral routes to persuasion.

### ***What about Feelings?***

The word “feeling” is clearly defined in Damasio’s neurobiological model of human emotions and feelings. An exact definition of “feeling,” however, was not located in ELM. Thus, the definition of feeling in ELM will be drawn from common practice — a feeling is what a human thinks about an object, event or situation based upon their emotional and mental evaluation of that object, event or situation.

In 1983, Petty, Cacioppo, Schumann articulated that attitude change via the central route to persuasion results from a person’s diligent consideration of information he or she feels is central to the true merits of a particular attitudinal position. Using the common definition of feeling provided above, this outlook provides support for the Grasswick Business-to-business Communications Model incorporating the use of feelings in the central route to persuasion.

In 1991, Petty, et al., offered that when the elaboration likelihood is high, affect may serve as an argument for the merits of the attitude object. “For some people or in some situations or for certain attitude objects, a determination of the central merits of the object entails an analysis of one’s feelings rather than (or in addition to) one’s beliefs and behaviors” (Petty, et al., 1991, page 187). This perspective also provides support for the Grasswick Business-to-business Communications Model including the use of feeling in the central route to persuasion.

## ***Rhetorical Figures***

As previously provided, benefits of using rhetorical figures in B2C and B2B advertisements include making the ad more interesting (McQuarrie and Mick, 1999); increasing elaboration, because the consumer or buying center member must figure out the ad's message, which in turn may increase the memorability of the ad; and increasing the consumer's or member's pleasure from "solving the puzzle" of the rhetorical device (Phillips and McQuarrie, 2004), which may increase the amount of attention a consumer or buying center member gives to an ad (Phillips and McQuarrie, 2002).

An additional benefit of solving the puzzle of a rhetorical figure is the increased level of persuasion associated with a self-generated conclusion or inference about a rhetorical figure in an ad, i.e., a consumer or buying center member self-generates the desired message of the ad by solving the rhetorical figure and is thereby more persuaded by the ad since they have arrived at the conclusion on their own (McQuarrie and Phillips, 2008; Phillips and McQuarrie, 2002).

Also previously provided, Schermer, Chapin and McPherson routinely use rhetorical figures in their B2B ads because they are often the quickest tool to get a buying center member to feel something that is tied to emotion "and even more so to instinct, either to avoid pain or gain pleasure," says Schermer.

The many benefits and few pitfalls of using rhetorical figures in B2B ads supports the inclusion of ads with rhetorical figures in the Grasswick Business-to-business Communications Model.

## ***Current Practices of Business-to-business Advertising Agencies***

The following examples of current practices and viewpoints in B2B advertising provide support for the Grasswick Business-to-business Communications Model.

The Business-to-business Marketing Communications Effects Model offers that a B2B buying member with low BTI may respond to an ad with an emotion that is processed through the peripheral route of processing and then develop first an attitude toward the ad and then an attitude toward the brand. McPherson thinks this is not a one-way process and that it may just as easily work in the other direction (an attitude toward a brand can affect an attitude toward an ad).

When asked about the peripheral and central routes of processing used in the Business-to-business Marketing Communications Effects Model, McPherson stated that they [her agency] need to serve both routes in an ad — an ad “has to make somebody stop on the page and then it has to give information that leads to a changing of thinking and leads to some sort of action, that’s the persuasive part.”

When asked if a person can have a cognitive and emotional response to an ad, especially if the ad uses rhetorical copy [text] or figures, McPherson responded, “Yes, because the whole point of the rhetorical is to create a feeling or an attitude before you provide information.”

Chapin also agreed that when a person solves the puzzle of a rhetorical figure in an ad they use both the central and peripheral routes of processing.



As for the use of emotions in advertising, McPherson states, “I don’t think anybody in our audience ever looks at anything with one mind. You can’t shut off your emotional mind and look at something only rationally.”

### ***Significance of the Grasswick Business-to-business Communications Model***

The primary significance of the Grasswick Business-to-business Communications Model is that it proposes a dual importance for human emotions in advertising and marketing — as a necessary component of a human’s ability to make decisions more efficiently and quicker when responding to an ad or brand through the central route to persuasion and/or as a simple cue when processing an ad or brand via the peripheral route to persuasion. In conjunction, a B2B buying center member with high BTI, and who responds to a message argument via the central route to persuasion, may be best served with an ad that rouses an emotion(s) and provides detailed information about the product.

An example of an ad processed through both the peripheral and central routes to persuasion is an ad with verbal and/or visual rhetorical figures. For instance, a buying center member may like an ad based upon simple verbal or visual rhetorical figures (schemes) used in the ad and processed through the peripheral route to persuasion (see Figure 3). A member may also like an ad more after they have “solved” an ad containing a metaphor or irony (a trope) (see Figure 3). This step would entail processing through both the peripheral and central routes to persuasion.

Examples of emotions that may increase the efficiency and quickness of a decision made by a buying center member include pride, envy, fear, hope, and

emulation — by experiencing one of these emotions the member will have fewer alternatives to consider when making a decision that will best meet their intended goal or outcome.

A secondary significance of the newly adapted model is that advertisers and marketers now have a continuous route of persuasion based on the use of emotions for developing attitude toward the ad and attitude toward the brand.

In closing, the Grasswick Business-to-business Communications Model capitalizes on the fact that a primary goal of a human being is to continue their own unique existence in a positive fashion and how a human's own set of emotions and feelings contribute to this endeavor — a powerful insight into what drives human behavior and decision making and a powerful tool for developing and implementing strategic advertising and marketing campaigns.

### ***Limitations of the Study***

A limitation of this study is that the Grasswick Business-to-business Communications Model has not been tested by B2B advertising and marketing professionals.

### ***Future Research***

Future research should incorporate testing the Grasswick Business-to-business Communications Model in a B2B setting, keeping up with new advancements in the neurobiology of human emotions and feelings, and integrating this information into modified or new models of how best to advertise and market to human beings.

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# Figures

Figure 1

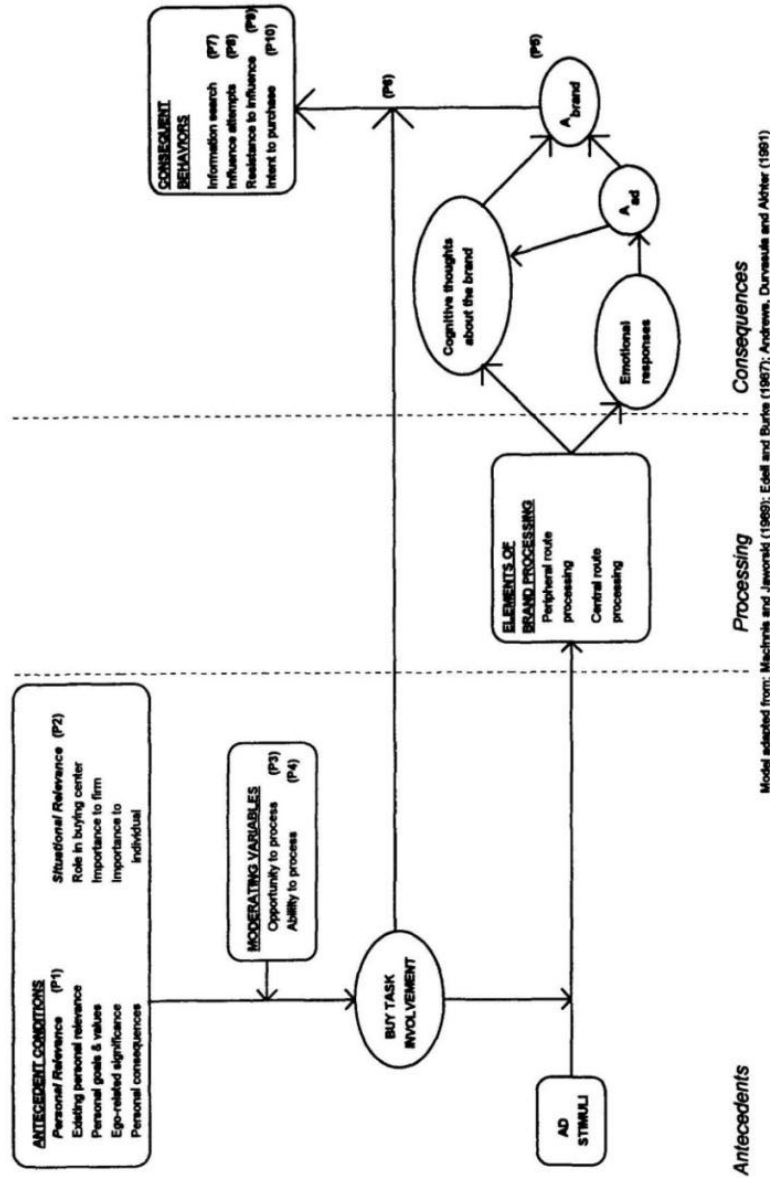
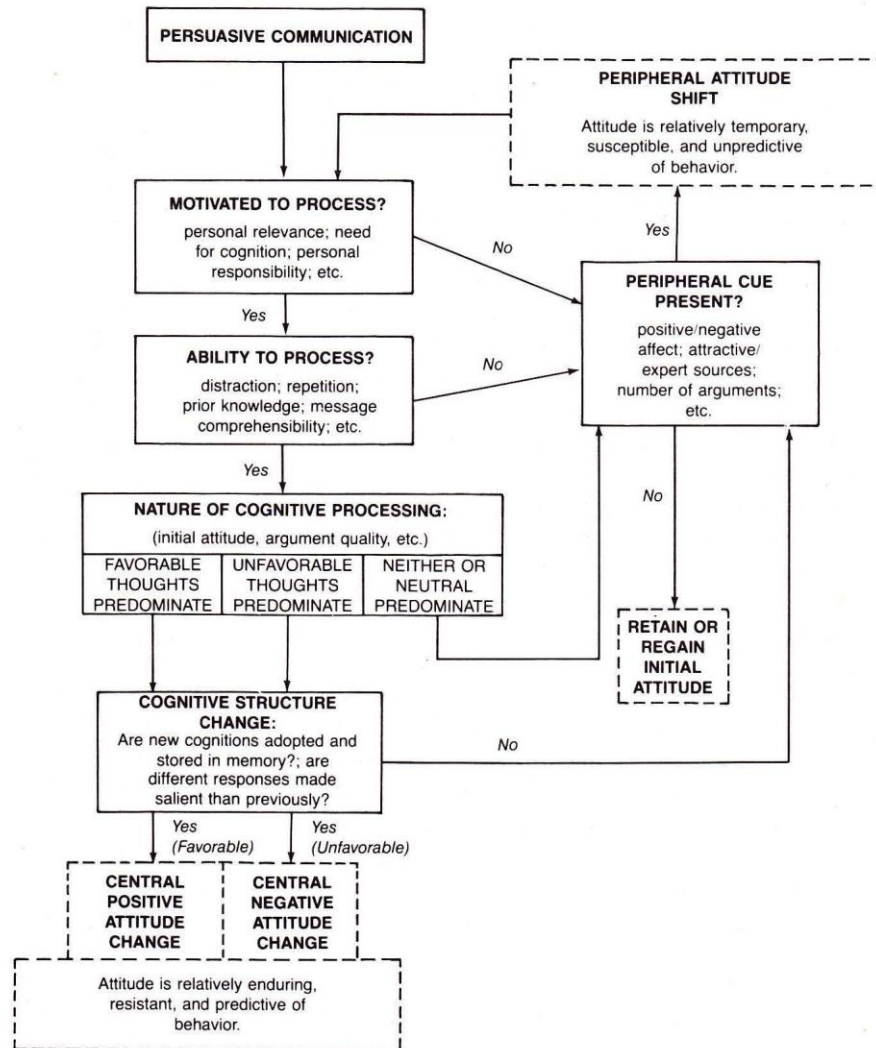


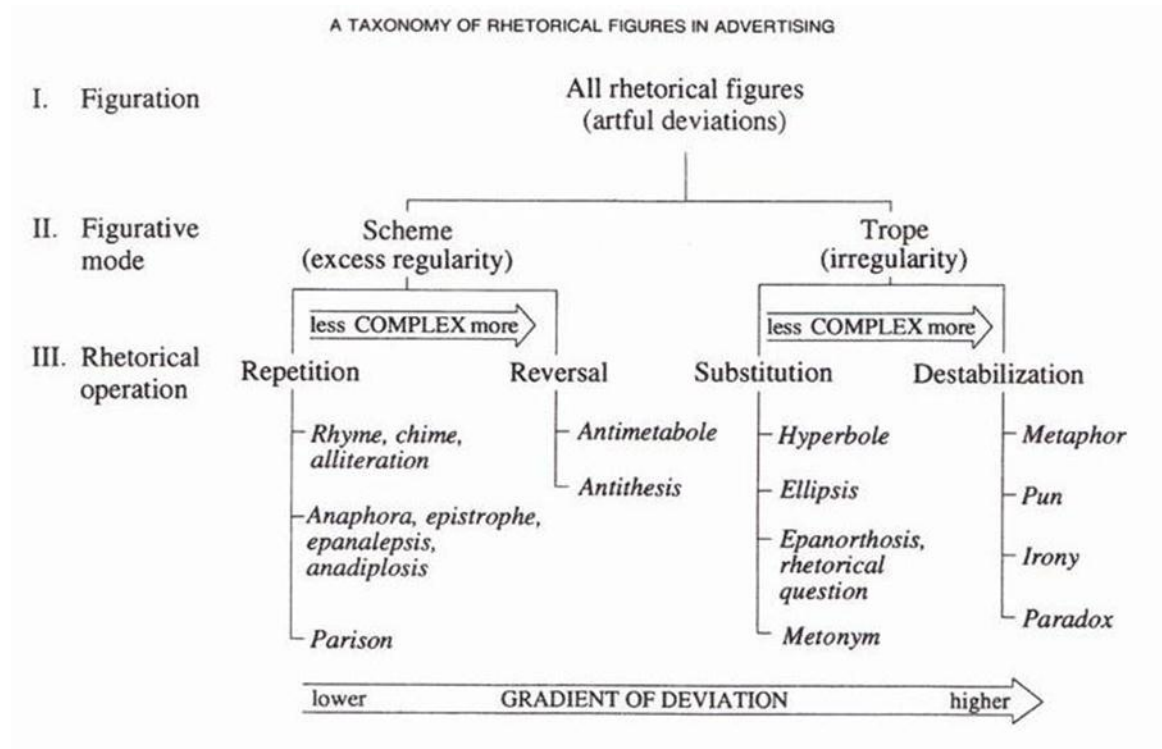
Figure 1: The Business-to-business Marketing Communications Effects Model.  
Source: D Gilliland and W Johnston; Toward a Model of Business-to-business Marketing Communications Effects; Industrial Marketing Management, 1997, 26, 15-29; page 22. Permission to use figure granted from Elsevier Limited June 20, 2012, License number 2933150503963.

**Figure 2**



**Figure 2: The Elaboration Likelihood Model of Persuasion. Source: R Petty and J Cacioppo; The Elaboration Likelihood Model of Persuasion; Advances in Experimental Social Psychology, Volume 19, Editor Leonard Berkowitz, 1986, pages 123-205; page 126. Permission to use figure granted from Elsevier Books July 13, 2012, License number 2947180140922.**

**Figure 3**



**Figure 3: A Taxonomy of Rhetorical Figures in Advertising.** Source: E McQuarrie and D Mick; Figures of Rhetoric in Advertising Language; Journal of Consumer Research, March 1996, Vol. 22, 424-438; page 426; publisher University of Chicago. Permission to use figure granted from University of Chicago Press July 10, 2012, Reference number 0049536773, Grant number 106308.



**Figure 4**



**Medical devices deserve the right protection too.**

As a market leader in plastic molding, we have the expertise and resources to produce the solutions you need more quickly and efficiently than smaller molders. With more than 60 years of experience, Caplugs is the ideal choice for your medical device protection needs.

Caplugs plastic molded parts:

- Ensure cleanliness and parts integrity
- Protect medical devices and instruments during processing, packaging and shipping
- Come in a wide range of medical, FDA and commercial grade materials
- Include tip protectors, device components, caps, plugs, packaging and more

For more information, visit us at [www.caplugs.com](http://www.caplugs.com) or contact a medical sales specialist at **1.888.CAPLUGS**.

**Custom Capabilities**  
Caplugs' engineers will work with you one-on-one to design a part to fit your specifications. Our comprehensive capabilities keep everything in-house, from engineering and tool fabrication to production and packaging, ensuring project accuracy and speed.



**Caplugs**

[www.info.hotims.com/41278-106](http://www.info.hotims.com/41278-106)

**Figure 4: From the Taxonomy of Rhetorical Figures in Advertising, the ad's headline is an example of Trope-Destabilization-Pun-Resonance. There are no rhetorical figures in the ad's copy or picture.**

**Ad placed in March 2012 online issue of Medical Design. Ad title "Caplugs Medical Ad © 2012."**

**Permission to use ad obtained from Steven A. Smith, Vice President, Marketing, Caplugs, email dated June 22, 2012.**

**Figure 5**

Apple Rubber's  
microminiature  
silicone seals are  
tiny...  
but they're  
**HUGE**  
on quality.

Some call us "Control Freaks." We take that as a compliment.

With seals available in a wide variety of materials, shapes, and over 1,000 sizes — from inside diameters (I.D.) .015 inches (0.4 mm) to .079 inches (2.0 mm) — Apple Rubber can provide you with everything you need to meet the rigorous demands of today's medical industry. Biomedical testing and full lot traceability available on every product, along with our Class 10,000, ISO Class 7 Cleanroom, gives you the confidence you need and the quality you demand for medical appliances, dialysers, medical pump seals, IV components, feeding devices, implant materials, and more — directly from our USA plant.



 Seal it right. Right from Apple.  
**APPLE RUBBER PRODUCTS INC.**  
www.applerubber.com 1.800.828.7745

Now accepting  
  

Scan using the Microsoft Tag App to tour Apple Rubber.  
www.info.hotims.com/36190-102

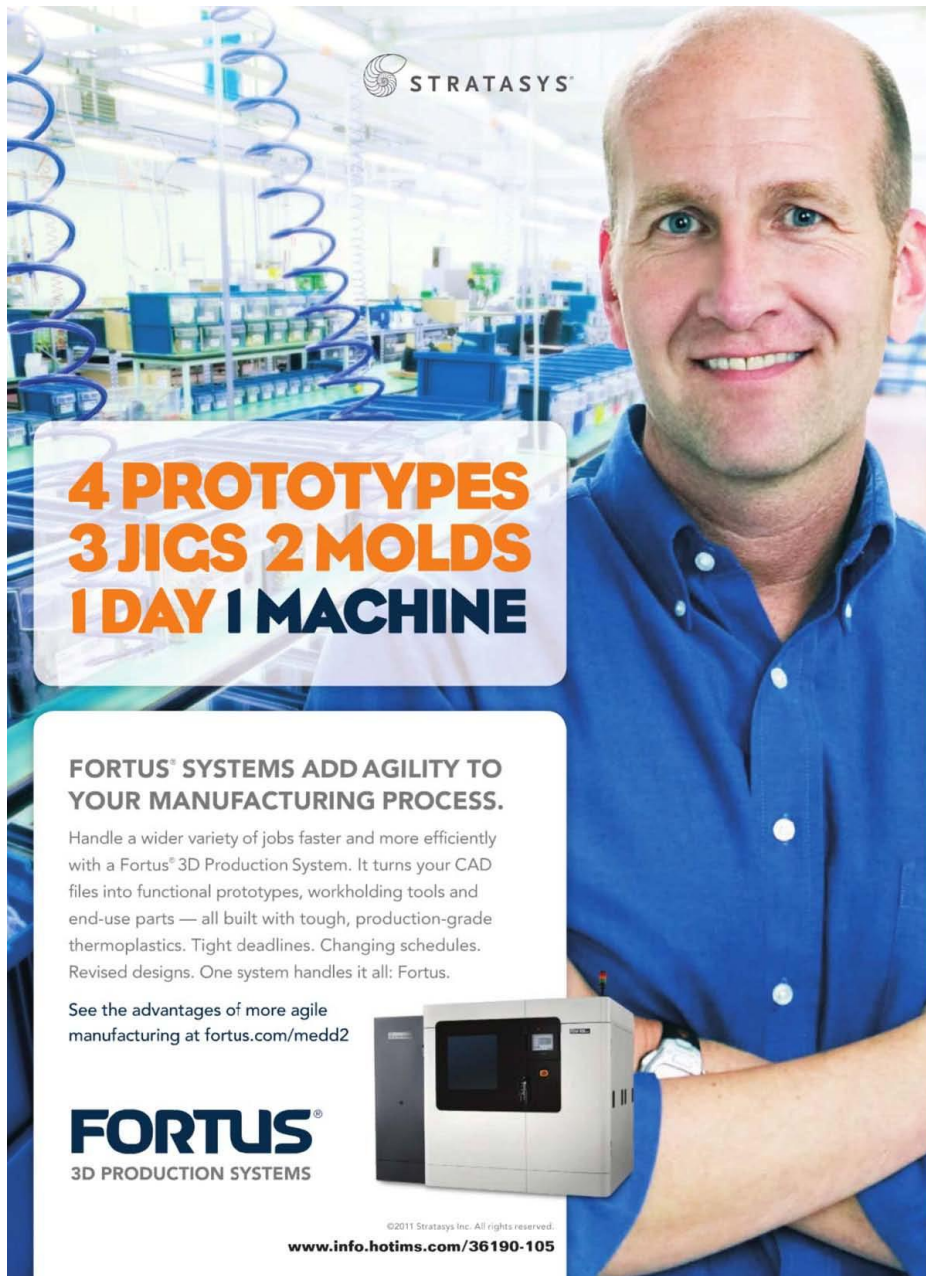
 @applerubber

+1.716.684.6560 • FAX +1.716.684.8302 • email: info@applerubber.com • 310 Erie St., Lancaster, NY 14086-9504 USA

Figure 5: From the Taxonomy of Rhetorical Figures in Advertising, the ad's headline is an example of Scheme-Reversal-Antithesis; the ad's copy is an example of Trope-Substitution-Ellipsis. There are no rhetorical figures in the ad's picture.

Ad placed in September 2011 online issue of Medical Design. Permission to use ad obtained from Lynne Parry, Trade Show Manager, Apple Rubber Products, Inc., email dated June 15, 2012.

**Figure 6**



**STRATASYS**

**4 PROTOTYPES  
3 JIGS 2 MOLDS  
1 DAY 1 MACHINE**

**FORTUS® SYSTEMS ADD AGILITY TO  
YOUR MANUFACTURING PROCESS.**

Handle a wider variety of jobs faster and more efficiently with a Fortus® 3D Production System. It turns your CAD files into functional prototypes, workholding tools and end-use parts — all built with tough, production-grade thermoplastics. Tight deadlines. Changing schedules. Revised designs. One system handles it all: Fortus.

See the advantages of more agile manufacturing at [fortus.com/medd2](http://fortus.com/medd2)

**FORTUS®**  
3D PRODUCTION SYSTEMS

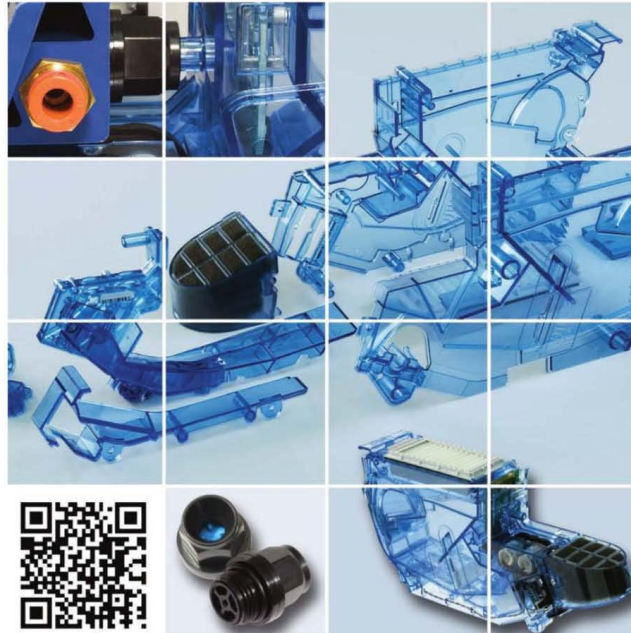
©2011 Stratasys Inc. All rights reserved.  
[www.info.hotims.com/36190-105](http://www.info.hotims.com/36190-105)

**Figure 6: From the Taxonomy of Rhetorical Figures in Advertising, the ad's headline is an example of Scheme-Repetition-Parison. There are no rhetorical figures in the ad's copy or picture.**

**Ad placed in September 2011 online issue of Medical Design. Permission to use ad obtained from Ruth Jacques, Stratasys, email dated June 26, 2012.**

**Figure 7**

## Does Your Medical Device Need To See A Specialist?



High tolerance medical components and assemblies are what we work with everyday at Minnesota Rubber and Plastics. Our experience in design, sealing and manufacturing complex medical devices has made us the preferred partner for industry

leaders throughout North America, Europe and Asia. The next time your medical component or assembly seems impossible, there's no one better to partner with than Minnesota Rubber and Plastics. We'll make your tough application a reality.

**Minnesota Rubber & Plastics**  
(952) 927-1400  
[www.mnrubber.com](http://www.mnrubber.com)

**Minnesota Rubber & Plastics**  
Quadion Corporation  
*Engineered to improve performance.  
Designed to reduce costs.*

[www.info.hotims.com/36190-106](http://www.info.hotims.com/36190-106)

**Figure 7: From the Taxonomy of Rhetorical Figures in Advertising, the ad's headline is an example of Trope-Substitution-Rhetorical Question. There are no rhetorical figures in the ad's copy or picture.**

**Ad placed in September 2011 online issue of Medical Design. Permission to use ad obtained from Bill Pederson, Marketing and Communication Manager, Minnesota Rubber & Plastics, email dated June 15, 2012.**



**Figure 8**

The advertisement features a central image of a white medicine bottle with a label that reads: "PTI Engineered Plastics", "RX# 0013485 M. Rathbone", "Medical Manufacturers", "Take two (2) tablet(s) for", "by production delays in p", "Innovationazole 500mg", "Mfg: PTI Engineered Plastics", "QTY: 250 - May refill as o". Two green and blue capsules lie in front of the bottle. The background is a light green gradient with a blue and white abstract wave pattern at the bottom. At the top, a horizontal sequence of five green circular icons with arrows points right, labeled "Vision/Ideation", "Design", "Engineering", "Prototyping", and "Production".

**The cure for product development headaches.**

Reduce your product development headaches, from the initial vision through world-class manufacturing, with PTI's integrated P3™ prototype-to-production process. For more than 25 years, the PTI team of medical product designers, engineers and manufacturing experts has worked closely—from initial component design through engineering and prototyping to state-of-the art injection molding—to ensure speed to market and superior product performance.

Save the headache. For medical product development and manufacturing services designed to deliver, contact PTI Engineered Plastics at 586.263.5100 or visit us at [PTImedical.com](http://PTImedical.com) to learn more.

FDA Registered,  
ISO 13485:2003,  
Class 100K Cleanroom

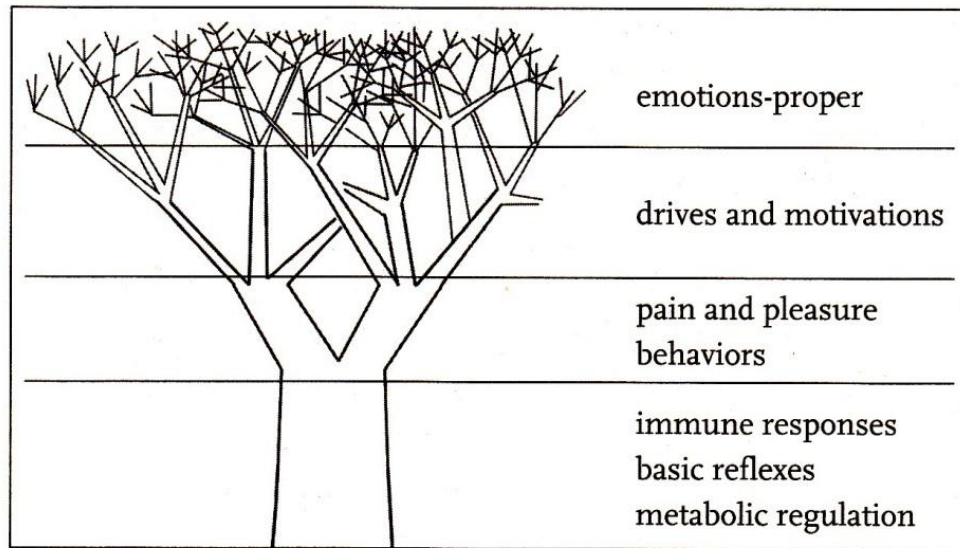
**PTI Engineered Plastics**  
Leveraging the power of imagination™  
[www.info.hotims.com/36190-115](http://www.info.hotims.com/36190-115)

50900 Corporate Drive, Macomb, MI 48044 | [PTImedical.com](http://PTImedical.com)

**Figure 8: From the Taxonomy of Rhetorical Figures in Advertising, the ad's headline is an example of Trope-Destabilization-Metaphor. The ad's picture is an example of Trope-Destabilization-Visual Metaphor.**

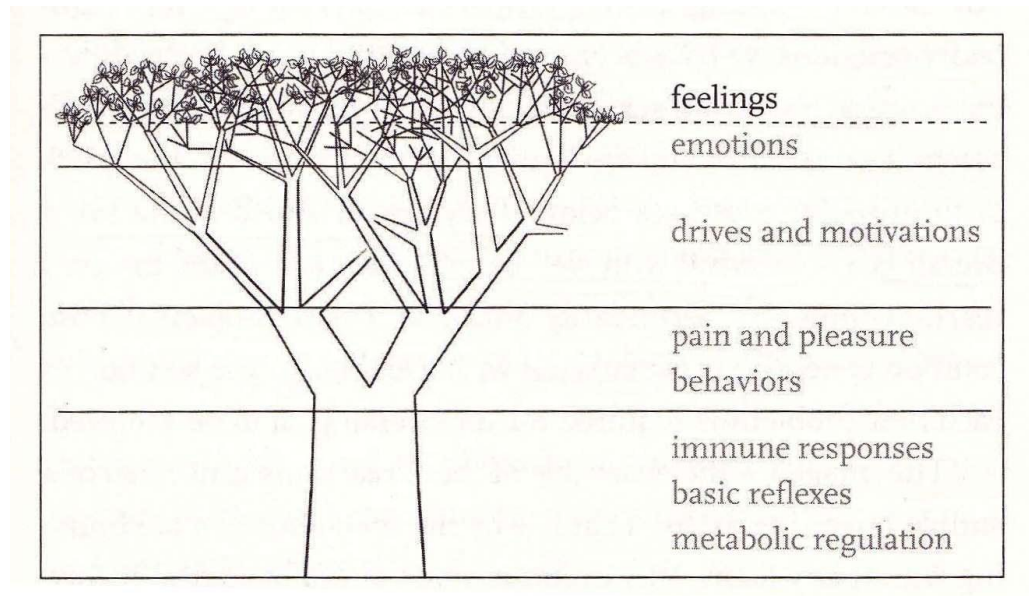
**Ad placed in September 2011 online issue of Medical Design. Permission to use ad obtained from Kurt Nerva, President PTI, via Cheryl Kaiser, Sales & Marketing CSR, email dated June 15, 2012.**

**Figure 9**



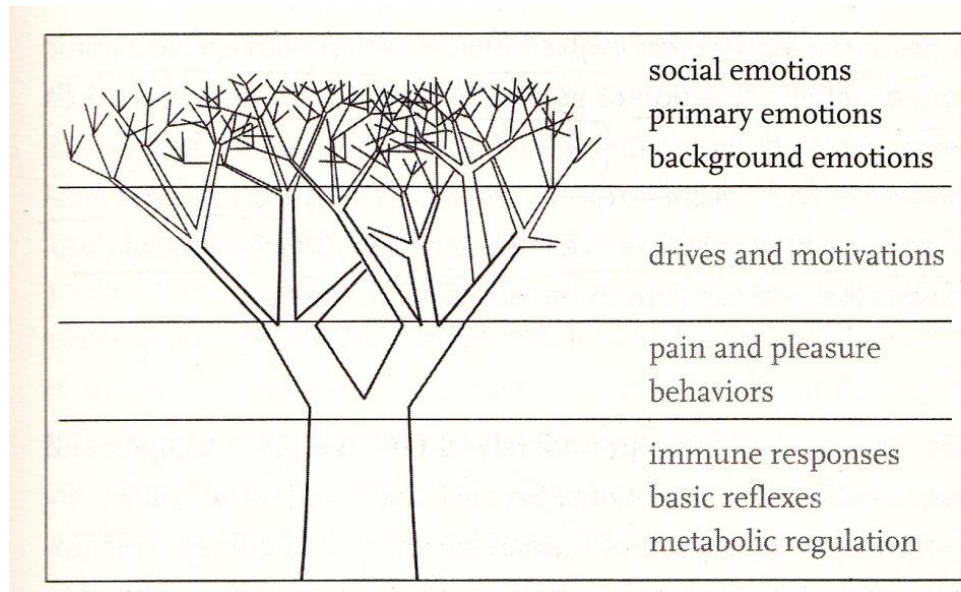
**Figure 9: Levels of automated homeostatic regulation in a human being; regulations range from simple (bottom level) to complex (top level). Source: A. Damasio; Looking for Spinoza: Joy, Sorrow, and the Feeling Brain; 2003, page 32. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**

**Figure 10**



**Figure 10: Feelings support an additional level of homeostatic regulation in a human being. Feelings are mental expressions of all other levels of homeostatic regulation. Source: A. Damasio; Looking for Spinoza: Joy, Sorrow, and the Feeling Brain; 2003, page 37. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**

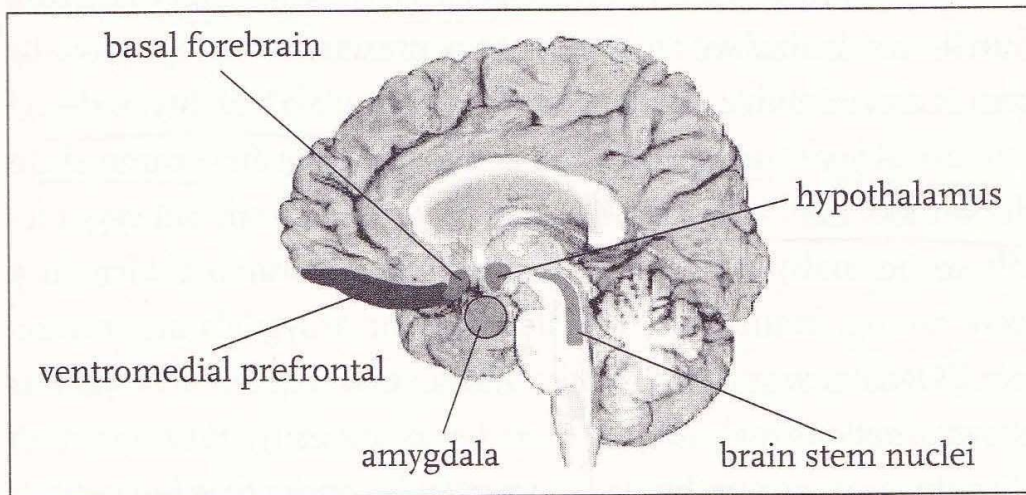
**Figure 11**



**Figure 11: A human being has at least three kinds of emotions-proper: background emotions, primary emotions, and social emotions. In accordance with the nesting principle, social emotions incorporate responses that are part of primary and background emotions. Source: A. Damasio; Looking for Spinoza: Joy, Sorrow, and the Feeling Brain; 2003, page 45. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**

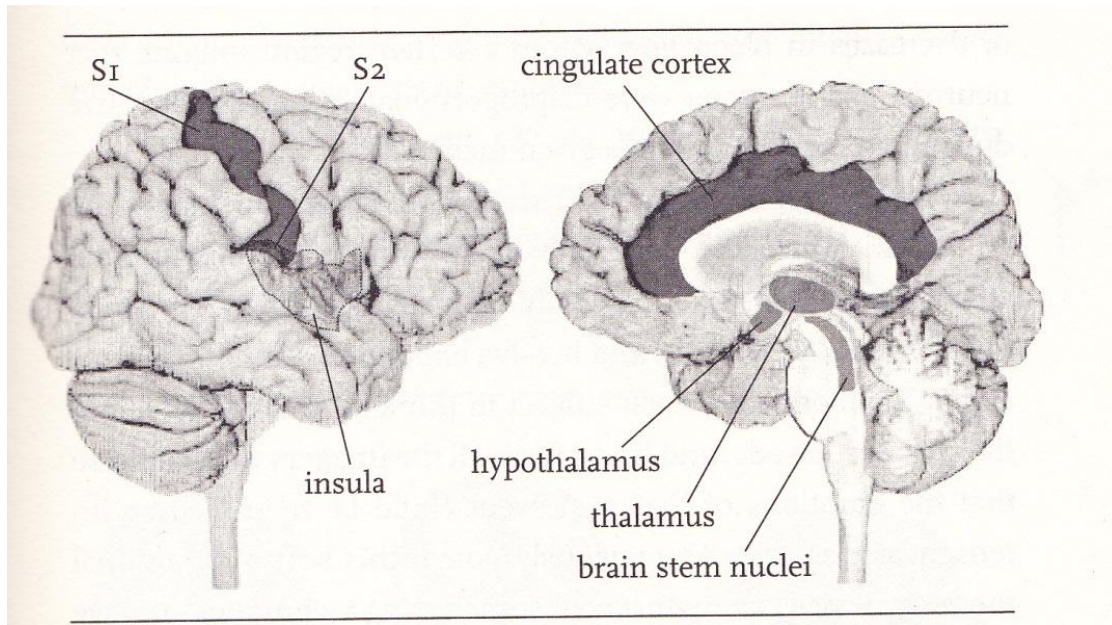


**Figure 12**



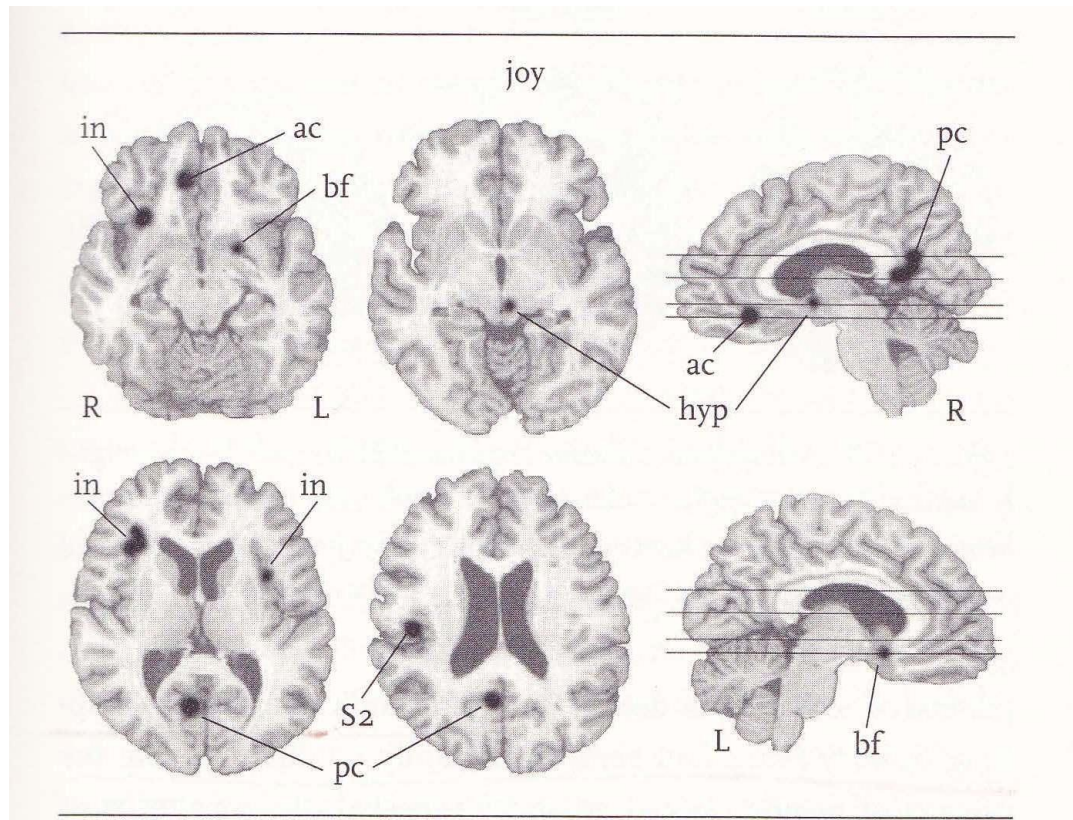
**Figure 12: The human brain has multiple emotion triggering and execution sites. Emotion triggering sites include parts of the amygdala and the ventromedial prefrontal cortex. Emotion-execution sites include the basal forebrain, hypothalamus, or nuclei of the brainstem. Source: A. Damasio; *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*; 2003, page 59. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**

**Figure 13**



**Figure 13: The main somatosensing regions of the human brain from the level of the brain stem to the cerebral cortex. Source: A. Damasio; Looking for Spinoza: Joy, Sorrow, and the Feeling Brain; 2003, page 97. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**

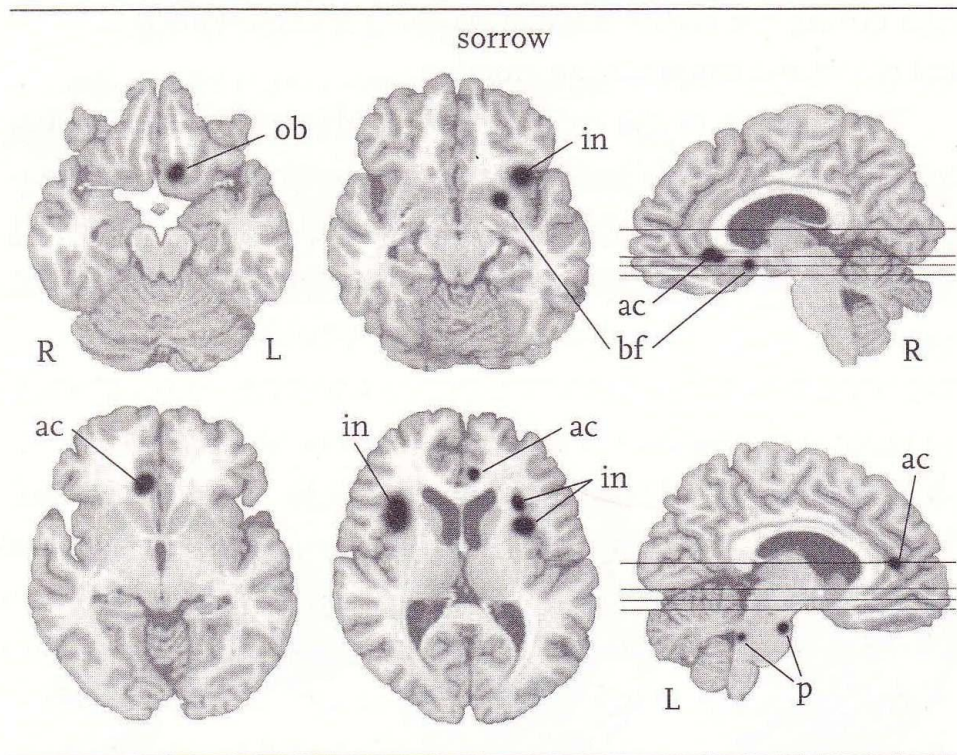
**Figure 14**



**Figure 14: Regions of a human brain activated during feelings of joy. Images of the brain activity were recorded by a positron-emission tomography or PET scan. Brain regions are abbreviated as follows: anterior cingulate (ac), posterior cingulate (pc), hypothalamus (hyp), basal forebrain (bf), and insula (in). The right hemisphere is marked R and the left L. Source: A. Damasio; *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*; 2003, page 99. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**



**Figure 15**



**Figure 15: Regions of a human brain activated during feelings of sorrow. Images of the brain activity were recorded by a positron-emission tomography or PET scan. Brain regions are abbreviated as follows: anterior cingulate (ac), basal forebrain (bf), and insula (in). The right hemisphere is marked R and the left L. Source: A. Damasio; *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*; 2003, page 100. Permission to use figure obtained from Drs. Hanna and Antonio Damasio via Cinthya M. Nuñez, email dated June 20, 2012.**

## Tables

**Table 1. Use of Verbal Rhetorical Figure in Headline**

Coder name: Jennifer Grasswick

Trade journal name: Medical Design.com

B2B Industry: Medical device

Issue: March 2012											Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	
Page number	1	3	5	7	9	11	19	23	41	42	10
<b>Verbal rhetorical figure in headline</b>											
Yes (1)	1	1	1	1		1		1	1	1	8
No (0)					0		0				2
Scheme/Repetition Rhyme											
Scheme/Repetition Chime											
Scheme/Repetition Anaphora						1		1			2
Scheme/Repetition Epistrophe											
Scheme/Repetition Anadiplosis									1		1
Scheme/Repetition Parison											
Scheme/Reversal Antimetabole											
Scheme/Reversal Antithesis											
Trope/Substitution Hyperbole											
Trope/Substitution Rhetorical Question										1	1
Trope/Substitution Ellipsis											
Trope/Substitution Metonym											
Trope/Destabilization Metaphor			1								1
Trope/Destabilization/Pun Homonym									1		1
Trope/Destabilization/Pun Antanaclasses											
Trope/Destabilization/Pun Syllepsis											
Trope/Destabilization/Pun Resonance	1	1		1							3
Trope/Destabilization Paradox											
Trope/Destabilization Irony											

**Table 2. Use of Verbal Rhetorical Figure in Body Copy**

Coder name: Jennifer Grasswick

Trade journal name: Medical

Design.com

B2B Industry: Medical device

Issue: March 2012											Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	
Page number	1	3	5	7	9	11	19	23	41	42	10
<b>Verbal rhetorical figure in body copy</b>											
Yes (1)	1		1				1		1		4
No (0)		0		0	0	0		0		0	6
Scheme/Repetition Rhyme											
Scheme/Repetition Chime											
Scheme/Repetition Anaphora											
Scheme/Repetition Epistrophe											
Scheme/Repetition Anadiplosis											
Scheme/Repetition Parison											
Scheme/Reversal Antimetabole											
Scheme/Reversal Antithesis	1								1		2
Trope/Substitution Hyperbole											
Trope/Substitution Rhetorical Question											
Trope/Substitution Ellipsis											
Trope/Substitution Metonym											
Trope/Destabilization Metaphor			1								1
Trope/Destabilization/Pun Homonym									1		1
Trope/Destabilization/Pun Antanaclasses											
Trope/Destabilization/Pun Syllepsis											
Trope/Destabilization/Pun Resonance			1				1				2
Trope/Destabilization Paradox											
Trope/Destabilization Irony											

**Table 3. Use of Visual Rhetorical Figure in Picture**

Coder name: Jennifer Grasswick

Trade journal name: Medical

Design.com

B2B Industry: Medical device

<b>Issue: March 2012</b>											<b>Totals</b>
Full page ad number	1	2	3	4	5	6	7	8	9	10	
Page number	1	3	5	7	9	11	19	23	41	42	10
<b>Visual rhetorical figure in picture</b>											
Yes (1)	1	1									2
No (0)			0	0	0	0	0	0	0	0	8
Scheme/Repetition Visual Rhyme											
Scheme/Repetition Visual Chime											
Scheme/Repetition Visual Anaphora											
Scheme/Repetition Visual Epistrophe											
Scheme/Repetition Visual Anadiplosis											
Scheme/Repetition Visual Parison											
Scheme/Reversal Visual Antimetabole											
Scheme/Reversal Visual Antithesis											
Trope/Substitution Visual Hyperbole											
Trope/Substitution Visual Rhetorical Question											
Trope/Substitution Visual Ellipsis											
Trope/Substitution Visual Metonym											
Trope/Destabilization Visual Metaphor		1									1
Trope/Destabilization/Pun Visual Homonym											
Trope/Destabilization/Pun Visual Antanaclasses											
Trope/Destabilization/Pun Visual Syllepsis											
Trope/Destabilization/Pun Visual Resonance											
Trope/Destabilization Visual Paradox	1										1
Trope/Destabilization Visual Irony											
<b>Ad layered</b>											
Yes (1)	1		1						1		3
No (0)		0		0	0	0	0	0		0	7
<b>Ad anchored</b>											
Yes (1)		1	1	1					1	1	5

No (0)	0				0	0	0	0			5
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**Table 4. Use of Verbal Rhetorical Figure in Headline**

Coder name: Jennifer  
Grasswick  
Trade journal name:  
**Medical Design.com**  
B2B Industry: Medical  
device

Issue: September 2011																		Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	17
Page number	*	1	3	5	7	9	11	15	17	19	21	27	29	31	39	57	58	
Verbal rhetorical figure in headline																		
Yes (1)	1		1		1	1	1	1		1	1	1				1	1	11
No (0)		0		0					0				0	0	0			6
Scheme/Repetition Rhyme																		
Scheme/Repetition Chime							1					1			1	1		4
Scheme/Repetition Anaphora																1		1
Scheme/Repetition Epistrophe																		
Scheme/Repetition Anadiplosis																		
Scheme/Repetition Parison					1													1
Scheme/Reversal Antimetabole																		
Scheme/Reversal Antithesis			1															1
Trope/Substitution Hyperbole																		
Trope/Substitution Rhetorical Question						1												1
Trope/Substitution Ellipsis										1							1	2
Trope/Substitution Metonym																		
Trope/Destabilization Metaphor											1							1
Trope/Destabilization/Pun Homonym							1											1
Trope/Destabilization/Pun Antanacasis																		
Trope/Destabilization/Pun Syllepsis																		
Trope/Destabilization/Pun Resonance	1							1										2

Trope/Destabilization Paradox																			
Trope/Destabilization Irony																			
*Inside front cover																			

**Table 5. Use of Verbal Rhetorical Figure in Body Copy**

Coder name: Jennifer  
Grasswick  
**Trade journal name:**  
**Medical Design.com**  
B2B Industry: Medical  
device

<b>Issue: September 2011</b>																		<b>Totals</b>
Full page ad number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	17
Page number	*	1	3	5	7	9	11	15	17	19	21	27	29	31	39	57	58	
<b>Verbal rhetorical figure in body copy</b>																		
Yes (1)	1		1	1			1									1		5
No (0)		0			0	0		0	0	0	0	0	0	0	0		0	12
Scheme/Repetition Rhyme																		
Scheme/Repetition Chime																1		1
Scheme/Repetition Anaphora																		
Scheme/Repetition Epistrophe																		
Scheme/Repetition Anadiplosis							1											1
Scheme/Repetition Parison																		
Scheme/Reversal Antimetabole																		
Scheme/Reversal Antithesis	1																	1
Trope/Substitution Hyperbole																		
Trope/Substitution Rhetorical Question																		
Trope/Substitution Ellipsis			1															1
Trope/Substitution Metonym																		
Trope/Destabilization Metaphor				1														1
Trope/Destabilization/Pun Homonym																		
Trope/Destabilization/Pun Antanacsis																		
Trope/Destabilization/Pun Syllepsis																		
Trope/Destabilization/Pun Resonance																		
Trope/Destabilization																		

Paradox																		
Trope/Destabilization Irony																		
*Inside front cover																		

**Table 6. Use of Visual Rhetorical Figure in Picture**

Coder name: Jennifer

Grasswick

Trade journal name:

Medical Design.com

B2B Industry: Medical

device

Issue: September 2011																		Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	17
Page number	*	1	3	5	7	9	11	15	17	19	21	27	29	31	39	57	58	
<b>Visual rhetorical figure in picture</b>																		
Yes (1)	1	1									1			1	1			5
No (0)			0	0	0	0	0	0	0	0		0	0			0	0	12
Scheme/Repetition Visual Rhyme																		
Scheme/Repetition Visual Chime																		
Scheme/Repetition Visual Anaphora																		
Scheme/Repetition Visual Epistrophe																		
Scheme/Repetition Visual Anadiplosis																		
Scheme/Repetition Visual Parison																		
Scheme/Reversal Visual Antimetabole																		
Scheme/Reversal Visual Antithesis																		
Trope/Substitution Visual Hyperbole																		
Trope/Substitution Visual Rhetorical Question																		
Trope/Substitution Visual Ellipsis																		
Trope/Substitution Visual Metonym																		
Trope/Destabilization Visual Metaphor		1									1			1	1			4
Trope/Destabilization/Pun Visual Homonym																		
Trope/Destabilization/Pun Visual Antanacsis																		
Trope/Destabilization/Pun Visual Syllepsis																		
Trope/Destabilization/Pun Visual Resonance																		

Trope/Destabilization Visual Paradox	1																	1
Trope/Destabilization Visual Irony																		
*Inside front cover																		
<b>Ad layered</b>																		
Yes (1)	1		1				1	1									1	5
No (0)		0		0	0	0			0	0	0	0	0	0	0		0	12
<b>Ad anchored</b>																		
Yes (1)					1	1				1	1						1	6
No (0)	0	0	0	0			0	0	0			0	0	0	0			11

**Table 7. Use of Verbal Rhetorical Figure in Headline**

Coder name: Anthony Froelich											
Trade journal name: Medical Design.com											
B2B Industry: Medical device											
<b>Issue: March 2012</b>											<b>Totals</b>
Full page ad number	1	2	3	4	5	6	7	8	9	10	10
Page number	1	3	5	7	9	11	19	23	41	42	
<b>Verbal rhetorical figure in headline</b>											
Yes (1)	1	1	1	1		1	1	1	1		8
No (0)					1					1	2
Scheme/Repetition Rhyme											
Scheme/Repetition Chime											
Scheme/Repetition Anaphora						1		1			2
Scheme/Repetition Epistrophe											
Scheme/Repetition Anadiplosis											
Scheme/Repetition Parison											
Scheme/Reversal Antimetabole											
Scheme/Reversal Antithesis											
Trope/Substitution Hyperbole											
Trope/Substitution Rhetorical Question											
Trope/Substitution Ellipsis											
Trope/Substitution Metonym											
Trope/Destabilization Metaphor		1									1
Trope/Destabilization/Pun Homonym											
Trope/Destabilization/Pun Antanaclasis									1		1
Trope/Destabilization/Pun Syllepsis											
Trope/Destabilization/Pun Resonance	1		1	1			1				4
Trope/Destabilization Paradox											
Trope/Destabilization Irony											

**Table 8. Use of Verbal Rhetorical Figure in Body Copy**

Coder name: Anthony Froelich											
Trade journal name: Medical Design.com											
B2B Industry: Medical device											
Issue: March 2012											Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	10
Page number	1	3	5	7	9	11	19	23	41	42	
Verbal rhetorical figure in body copy											
Yes (1)	1	1	1				1		1		5
No (0)				1	1	1		1		1	5
Scheme/Repetition Rhyme											
Scheme/Repetition Chime											
Scheme/Repetition Anaphora											
Scheme/Repetition Epistrophe											
Scheme/Repetition Anadiplosis											
Scheme/Repetition Parison											
Scheme/Reversal Antimetabole											
Scheme/Reversal Antithesis											
Trope/Substitution Hyperbole											
Trope/Substitution Rhetorical Question											
Trope/Substitution Ellipsis											
Trope/Substitution Metonym											
Trope/Destabilization Metaphor											
Trope/Destabilization/Pun Homonym											
Trope/Destabilization/Pun Antanaclasis	1								1		2
Trope/Destabilization/Pun Syllepsis											
Trope/Destabilization/Pun Resonance			1				1				2
Trope/Destabilization Paradox											
Trope/Destabilization Irony		1									1



**Table 9. Use of Visual Rhetorical Figure in Picture**

Coder name: Anthony Froelich											
Trade journal name: Medical Design.com											
B2B Industry: Medical device											
<b>Issue: March 2012</b>											<b>Totals</b>
Full page ad number	1	2	3	4	5	6	7	8	9	10	10
Page number	1	3	5	7	9	11	19	23	41	42	
<b>Visual rhetorical figure in picture</b>											
Yes (1)	1	1	1	1			1				5
No (0)					1	1		1	1	1	5
Scheme/Repetition Visual Rhyme											
Scheme/Repetition Visual Chime											
Scheme/Repetition Visual Anaphora											
Scheme/Repetition Visual Epistrophe											
Scheme/Repetition Visual Anadiplosis											
Scheme/Repetition Visual Parison											
Scheme/Reversal Visual Antimetabole											
Scheme/Reversal Visual Antithesis											
Trope/Substitution Visual Hyperbole											
Trope/Substitution Visual Rhetorical Question											
Trope/Substitution Visual Ellipsis											
Trope/Substitution Visual Metonymy											
Trope/Destabilization Visual Metaphor		1									1
Trope/Destabilization/Pun Visual Homonym											
Trope/Destabilization/Pun Visual Antanaclasis											
Trope/Destabilization/Pun Visual Syllepsis											
Trope/Destabilization/Pun Visual Resonance			1	1			1				3
Trope/Destabilization Visual Paradox											
Trope/Destabilization Visual Irony	1										1
<b>Ad layered</b>											
Yes (1)	1		1						1		3
No (0)		0		0	0	0	0	0		0	7
<b>Ad anchored</b>											
Yes (1)		1	1	1					1	1	5

No (0)	0				0	0	0	0			5

**Table 10. Use of Verbal Rhetorical Figure in Headline**

[illegible]

**Table 11. Use of Verbal Rhetorical Figure in Body Copy**

Coder name: Anthony Froelich																			
Trade journal name: Medical Design.com																			
B2B Industry: Medical device																			
Issue: September 2011																			Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		17
Page number	*	1	3	5	7	9	11	15	17	19	21	27	29	31	39	57	58		
Verbal rhetorical figure in body copy																			
Yes (1)	1	1	1		1	1	1	1			1				1	1			10
No (0)				1					1	1		1	1	1			1		7
Scheme/Repetition Rhyme																			
Scheme/Repetition Chime																			
Scheme/Repetition Anaphora																			
Scheme/Repetition Epistrophe																			
Scheme/Repetition Anadiplosis							1												1
Scheme/Repetition Parison																1			1
Scheme/Reversal Antimetabole																			
Scheme/Reversal Antithesis																			
Trope/Substitution Hyperbole																			
Trope/Substitution Rhetorical Question																			
Trope/Substitution Ellipsis																			
Trope/Substitution Metonym																			
Trope/Destabilization Metaphor																			
Trope/Destabilization/Pun Homonym																			
Trope/Destabilization/Pun Antanaclasis	1																		1
Trope/Destabilization/Pun Syllepsis																			
Trope/Destabilization/Pun Resonance		1						1			1				1				4
Trope/Destabilization Paradox					1	1													2
Trope/Destabilization Irony			1																1
*Inside front cover																			

**Table 12. Use of Visual Rhetorical Figure in Picture**

Coder name: Anthony Froelich																			
Trade journal name: Medical Design.com																			
B2B Industry: Medical device																			
Issue: September 2011																			Totals
Full page ad number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		17
Page number	*	1	3	5	7	9	11	15	17	19	21	27	29	31	39	57	58		
Visual rhetorical figure in picture																			
Yes (1)	1	1		1			1	1			1	1		1	1				9
No (0)			1		1	1			1	1			1			1	1		8
Scheme/Repetition Visual Rhyme																			
Scheme/Repetition Visual Chime																			
Scheme/Repetition Visual Anaphora																			
Scheme/Repetition Visual Epistrophe																			
Scheme/Repetition Visual Anadiplosis																			
Scheme/Repetition Visual Parison																			
Scheme/Reversal Visual Antimetabole																			
Scheme/Reversal Visual Antithesis																			
Trope/Substitution Visual Hyperbole																			
Trope/Substitution Visual Rhetorical Question																			
Trope/Substitution Visual Ellipsis																			
Trope/Substitution Visual Metonym																			
Trope/Destabilization Visual Metaphor											1								1
Trope/Destabilization/Pun Visual Homonym																			
Trope/Destabilization/Pun Visual Antanaclassesis																			
Trope/Destabilization/Pun Visual Syllepsis																			
Trope/Destabilization/Pun Visual Resonance		1		1			1	1				1		1	1				7
Trope/Destabilization Visual Paradox																			
Trope/Destabilization Visual Irony	1																		1
*Inside front cover																			
Ad layered																			
Yes (1)	1		1				1	1								1			5
No (0)		0		0	0	0			0	0	0	0	0	0	0		0		12
Ad anchored																			
Yes (1)					1	1				1	1					1	1		6
No (0)	0	0	0	0			0	0	0			0	0	0	0				11

## **A. Ad Content Analysis Text**

### **1) Presence of verbal rhetorical figure?**

- a. No
- b. Yes
- c. Location
  - i. Headline
    - 1. Scheme (excessive regularity)
      - a. Repetition
        - i. Rhyme (repetition of syllables at the end of words: KitchenAid. For the way it's made.)
        - ii. Chime (key words in a phrase begin with identical sounds or letters: A tradition of trust.)
        - iii. Anaphora (repetition of words at the beginning of phrases: Early treatment. Early cure.)
        - iv. Epistrophe (repetition of words at the end of phrases: Choose to be your most beautiful. Salon beautiful.)
        - v. Anadiplosis (repetition of a word toward the end of one phrase and the beginning of the next: Kleenex Ultra. Ultra softness is all you feel.)
        - vi. Parison (marked parallelism between successive phrases; often involves the use of one or more embedded repeated words: You never had it so easy. Your tires never had it so good.)
      - b. Reversal
        - i. Antimetabole (repetition of a pair of words in a phrase in reverse order: Stops static before static stops you.)
        - ii. Antithesis (incorporation of binary opposites in a phrase: We got hot prices on cool stuff.)
    - 2. Trope (irregularity)
      - a. Substitution
        - i. Hyperbole (exaggerate or extreme claim: Experience color so rich you can feel it.)
        - ii. Rhetorical question (asking a question so as to make an assertion: Don't you have something better to do?)
        - iii. Ellipsis (a gap or omission that has to be completed: A lot of tires cost less than Michelin. That's because they should.)

- iv. Metonym (use of a portion, or any associated element, to represent the whole: The imports are getting nervous.)
- b. Destabilization
  - i. Metaphor (substitution based on underlying resemblance: Say hello to your child's new bodyguards.)
  - ii. Pun (general) (substitution based on accidental similarity)
    - 1. Homonym (one word can be taken in two senses: How to make a home run.)
    - 2. Antanaclasis (repeating a word in two different senses: Nobody knows the athlete's foot like the Athletes Foot.)
    - 3. Syllepsis (a verb takes on a different sense as clauses it modifies unfold: Built to handle the years as well as the groceries.)
    - 4. Resonance (a phrase is given a different meaning by its juxtaposition with a picture: Success Rice brings out the ham in you (with a picture of ham pieces in sauce.))
  - iii. Paradox (a self-contradictory, false, or impossible statement: Mark McGwire hit 42 home runs last year. But we held the bat.)
  - iv. Irony (a statement that means the opposite of what is said: Just another wholesome family sitcom (with a picture of the male lead licking cream off thighs.)
- ii. Body copy – repeat same categories and text from Headline section

## 2) Presence of visual rhetorical figure in picture?

- a. No
- b. Yes
  - i. Scheme (excessive regularity)
    - 1. Repetition
      - a. Rhyme (repetition of syllables at the end of words: KitchenAid. For the way it's made.)
      - b. Chime (key words in a phrase begin with identical sounds or letters: A tradition of trust.)
      - c. Anaphora (repetition of words at the beginning of phrases: Early treatment. Early cure.)
      - d. Epistrophe (repetition of words at the end of phrases: Choose to be your most beautiful. Salon beautiful.)

- e. Anadiplosis (repetition of a word toward the end of one phrase and the beginning of the next: Kleenex Ultra. Ultra softness is all you feel.)
    - f. Parison (marked parallelism between successive phrases; often involves the use of one or more embedded repeated words: You never had it so easy. Your tires never had it so good.)
  - 2. Reversal
    - a. Antimetabole (repetition of a pair of words in a phrase in reverse order: Stops static before static stops you.)
    - b. Antithesis (incorporation of binary opposites in a phrase: We got hot prices on cool stuff.)
- ii. Trope (irregularity)
  - 1. Substitution
    - a. Hyperbole (exaggerate or extreme claim: Experience color so rich you can feel it.)
    - b. Rhetorical question (asking a question so as to make an assertion: Don't you have something better to do?)
    - c. Ellipsis (a gap or omission that has to be completed: A lot of tires cost less than Michelin. That's because they should.)
    - d. Metonym (use of a portion, or any associated element, to represent the whole: The imports are getting nervous.)
  - 2. Destabilization
    - a. Metaphor (substitution based on underlying resemblance: Say hello to your child's new bodyguards.)
    - b. Pun (general) (substitution based on accidental similarity)
      - i. Homonym (one word can be taken in two senses: How to make a home run.)
      - ii. Antanaclasis (repeating a word in two different senses: Nobody knows the athlete's foot like the Athletes Foot.)
      - iii. Syllepsis (a verb takes on a different sense as clauses it modifies unfold: Built to handle the years as well as the groceries.)
      - iv. Resonance (a phrase is given a different meaning by its juxtaposition with a picture: Success Rice brings out the ham in you (with a picture of ham pieces in sauce.))
    - c. Paradox (a self-contradictory, false, or impossible statement: Mark McGwire hit 42 home runs last year. But we held the bat.)



- d. Irony (a statement that means the opposite of what is said: Just another wholesome family sitcom (with a picture of the male lead licking cream off thighs.)
- 3) Ad layered\*\*
  - a. Yes
  - b. No
- 4) Ad anchored\*\*\*
  - a. Yes
  - b. No

\*\*An ad is “layered” if there is a verbal rhetorical figure in the headline or a visual rhetorical figure in the picture and one or more verbal rhetorical figures in the body copy.

\*\*\*An ad is “anchored” if the body copy spells out in literal terms the meaning of a figure appearing in the headline or picture.

## ***B. Scheme and Trope Pronunciations***

Anadiplosis (an-uh-dih-plo-sis)

Anaphora (a-naph-o-ra)

Antanaclasis (an-tan-ah-cla-sis)

Antimetabole (an-tee-meh-ta-boe-lee)

Antithesis (an-tith-e-sis)

Epistrophe (i-pis-truh-fee)

Homonym (ha-mo-nym)

Hyperbole (hahy-pur-buh-lee)

Metonym (me-ta-nym)

Parison (par-uh-suhn)

Syllepsis (syl-lep-sis)